Exhibit 2

1	UNITED STATES DISTRICT COURT	
2	EASTERN DISTRICT OF CALIFORNIA	
3	SACRAMENTO DIVISION	
4	CASE NO. 23-cv-00425-WBS-CSK	
5		
6	SHANNON RAY, KHALA TAYLOR,	
7	PETER ROBINSON, KATHERINE	
8	SEBBANE, and RUDY BARAJAS,	
9	individually and on behalf	
10	of all those similarly situated,	
11	Plaintiffs,	
	vs.	
12	NATIONAL COLLEGIATE ATHLETIC	
13	ASSOCIATION, an unincorporated	
14	association,	
15	Defendant.	
16		
17	VIDEOTAPED DEPOSITION OF ORLEY ASHENFELTER, Ph.D.	
18	before RUTHANNE UNGERLEIDER, a Certified Court	
19	Reporter and Notary Public of the State of New	
20	Jersey, held at 502 Carnegie Center, Princeton,	
21	New Jersey, on Thursday, December 5, 2024,	
22	commencing at approximately 9:05 in the forenoon.	
23		
24	JOB No. 7045565	
25	PAGES 1 - 270	
	Page 1	
	rage 1	

```
1
      APPEARANCES:
 2
 3
      GUSTAFSON GLUEK PLLC
      Canadian Pacific Plaza
      120 South 6th Street, Ste. 2600
 4
      Minneapolis, Minnesota 55402
 5
           BY: DENNIS STEWART, ESQ.
      Attorneys for Plaintiffs Shannon Ray, Khala Taylor,
 6
      Peter Robinson, Katherine Sebbane and Rudy Barajas
 7
      FAIRMARK PARTNERS, LLP
      1001 G Street NW, Ste. 400
 8
      Washington, D.C. 20006
9
           BY:
                MICHAEL LIEBERMAN, ESQ.
                ANNIE CLEAVER, ESQ.
      Attorneys for Plaintiffs Shannon Ray, Khala Taylor,
10
11
      Peter Robinson, Katherine Sebbane and Rudy Barajas
12
      MUNGER, TOLLES & OLSON LLP
13
      560 Mission Street, 27th Floor
      San Francisco, California 94105
14
           BY:
                JUSTIN P. RAPHAEL, ESQ.
      Attorneys for Defendant NCAA
15
16
      KIRBY McINERNEY LLP
      600 B Street, Ste. 2110
      San Diego, California
17
                            92101
           BY: ROBERT J. GRALEWSKI, JR., ESQ. (Via Zoom)
18
                MARKO RADISAVLJEVIC, ESQ. (Via Zoom)
      Attorneys for the Ray Plaintiffs and Witness
19
20
      KOREIN TILLERY
      505 North 7th Street, Ste. 3600
21
      St. Louis, Missouri
                           6310
2.2
           BY: STEVEN M. BEREZNEY, ESQ. (Via Zoom)
2.3
      Attorneys for the Smart Plaintiffs
24
      ALSO PRESENT:
2.5
      ALAN PALLER, Videographer
```

1	Ray Plaintiffs and the witness.	
2	MR. BEREZNEY: Good morning. Steve	
3	Berezney, from Korein Tillery, on behalf of the Smart	
4	Plaintiffs.	
5	ORLEY CLARK ASHENFELTER, Ph.D., sworn.	
6	DIRECT EXAMINATION BY MR. RAPHAEL:	
7	Q Good morning, Professor Ashenfelter.	
8	A Good morning.	
9	Q You are an economics professor at	
10	Princeton University, correct?	
11	A I was. I just went Emeritus in July.	
12	Q Oh, congratulations.	
13	You have been deposed many times,	
14	correct?	
15	A Yes.	
16	Q How many times?	
17	A Well, not very often per year, but it's	
18	been a lot of years. So, I don't know, it might be	
19	20 or 30 maybe.	
20	Q What was the most recent occasion on	
21	which you were deposed?	
22	A This summer.	
23	Q And in what case was that?	
24	A That was a merger case involving the	
25	Federal Trade Commission was challenging the Kroger	
	Page 6	

1	A No.	
2	Q Now, you previously provided expert	
3	testimony in a case involving allegations of	
4	collusion by hospitals in the Detroit area?	
5	A Yes.	
6	Q And that case was called Cason-Merenda?	
7	A I don't remember what it was called,	
8	actually, but it was in Detroit.	
9	Q Can you think of any meaningful	
10	differences between the labor market for registered	
11	nurses in Detroit that you testified about in that	
12	case and the labor market for coaching that you	
13	defined in this case?	
14	A Well, they're not the same labor market.	
15	Q Okay.	
16	A I would say they're different they	
17	have different sets of skills.	
18	Q Why are the nurses in the Detroit case	
19	you testified in and the coaches in this case not in	
20	the same market?	
21	A Well, because they're not they're	
22	not the nurses the coaches couldn't act as	
23	nurses without having training in the nursing skills.	
24	It's possible that some coaches do, in which case	
25	they could be operate there.	

1	me just ask the question again.	
2	Do you have any opinion, sitting here	
3	today, on any labor market related to coaching that	
4	includes any coaching in college athletics?	
5	A Well, I have not actually tried to	
6	define an explicit labor market for coaching.	
7	I think that answers your question.	
8	Q I think it does.	
9	Let's mark this as, I think, Exhibit 69.	
10	A You want me to look at it?	
11	Q She's got to mark it first.	
12	(Whereupon November 1, 2024 Expert	
13	Report is received and marked as Exhibit 69 for	
14	identification.)	
15	MR. STEWART: Thank you.	
16	What did you say the number was, Justin?	
17	MR. RAPHAEL: I believe this is 69.	
18	Q Dr. Ashenfelter, do you recognize	
19	Exhibit 69 as a copy of the report that was submitted	
20	under your name on November 1 of 2024?	
21	A Yes.	
22	Q And you signed this report?	
23	A Yes.	
24	Q Who wrote this report?	
25	A I wrote it.	
	Page 17	

Veritext Legal Solutions Calendar-CA@veritext.com 866-299-5127

1 No, we didn't. Α 2 I mean, it is -- well, no, we didn't. 3 You have done that in prior cases, 0 though, right? 4 5 In some previous work. And the work I did actually, academic work, I have studied 6 especially race differences, but also differences by 7 gender in some aspects of labor market behavior. 8 9 0 Other than I think you mentioned issues of race and gender, any other economic principles of 10 11 labor markets that are unique as compared to the 12 economic principles applicable to consumer product 13 markets? 14 Α Well -- yes. Probably the biggest subject which 15 16 doesn't really have an analogy in product markets is 17 the development of human capital or human resource 18 skills, those are -- that's an extremely broad 19 subject. 20 In other words, we don't take the 21 products as given, people actually change, and how 22 they invest in themselves or others invest in them is a -- is another -- is a big subject in -- in the 23 24 labor -- in the study of labor markets, because it brings -- tells you about what the skills are that 25 Page 40

1	people have.
2	Q I think you're referring to human
3	capital theory?
4	A Yeah.
5	Q And human capital theory is foundational
6	to labor economics?
7	A It's important.
8	There's more to it than it's a little
9	bit narrower than to call it just human capital, but
10	it's the idea that there are investments made in
11	people is pretty central to some of the aspects of
12	labor economics, yeah.
13	Q As a matter of economics, is it correct
14	that some people might accept something for free that
15	they would not pay for if they had to?
16	A I'm sure, yeah.
17	Q People accept giveaways at baseball
18	games even though they might not pay for them,
19	products they'd get if they had to?
20	A I'm sure, yes. I don't know about
21	baseball games, but people do take giveaways.
22	Christmas presents, for example.
23	Q Well, some people might accept a dinner
24	that cost \$500 if it was given to them even if they
25	couldn't afford it, right?

1	A They might, sure.
2	Q Does an economist define the value of a
3	product or a service as the amount that the buyer
4	would be willing to pay for it?
5	A That the theory value does involve
6	that kind of issue, yes.
7	Q Well, is the value of a product or a
8	service the same in all cases as what a buyer would
9	be willing to pay for it?
10	A Well, this requires me to distinguish
11	between the market and the individual's preferences.
12	Q Right.
13	And the value that a particular buyer
14	gets from a product or service is not the same as the
15	market rate or value of that product or service,
16	right?
17	A It may not be.
18	Q And the market price of a product or
19	service is set by supply and demand from all buyers
20	and suppliers, right?
21	A Yes.
22	Q Is your analysis in this case measuring
23	Division I colleges' and universities' willingness to
24	pay for the class members' coaching?
25	A What we do is construct a method for
	Page 42

1	A You're averaging.
2	Well, all regressions are averages.
3	Q Right.
4	So, in your groups you're averaging
5	step-downs across a number of different sports,
6	right?
7	A We're estimating common coefficients
8	across some sports, yes.
9	It's not averaging, it's common
10	coefficients.
11	Q And that process of putting different
12	sports together in the same group could mask
13	variation between those sports, right?
14	A It's possible.
15	MR. RAPHAEL: We've been going about an
16	hour. Should we take a short break?
17	MR. STEWART: Yeah.
18	THE VIDEOGRAPHER: This concludes media
19	number one of the videotape deposition of Dr. Orley
20	Ashenfelter. The time is 10:05. We're off the
21	record.
22	(Brief recess taken.)
23	THE VIDEOGRAPHER: This begins media
24	number two of the videotape deposition of Dr. Orley
25	Ashenfelter. The time is 10:20. We're on the
	Page 50

objective is typically broader than just a measure of 1 2 some kind of monetary profit. There are -- I should say, there are 3 some universities that are for-profit universities 4 5 and you would analyze them like you would any other firm; others are not for-profit, and then other 6 issues become important. 7 8 Are you aware of any Division I college 0 9 or university that is for-profit? I don't know. 10 Α 11 I don't think there are any. 12 What happened to Trump University? And does the fact that Division I 13 Q colleges and universities are not for-profit affect 14 15 how economists would model how they make decisions? 16 Α So it would affect -- it would affect, 17 yes, to some extent. And do universities always increase 18 0 19 spending until the marginal cost of the spending 20 equals the marginal revenue? That is what would happen if you were in 2.1 22 a profit-maximizing enterprise, and I think it's 23 easier to characterize universities as the part that is similar to the firm is the cost minimization, but 24 then -- in other words, firms that are profit 25 Page 55

1	maximizers, we assume, are cost minimizers, but then
2	you have one further step, which is profit
3	maximization.
4	I think most people would think of
5	universities as being you can think of modeling
6	them as cost minimizers, but then when it came to the
7	next step of what their ultimate goal is, given that
8	they minimized costs, it wouldn't necessarily be
9	profits.
10	Q So a university will not always make an
11	expenditure that strike that.
12	A university will not always spend money
13	anytime the marginal revenue from that expenditure is
14	more than the cost, right?
15	A If they're not profit maximizers, they
16	don't do that, right? So that is basically the
17	definition of what a profit maximizer firm is, they
18	expand to the point where market revenues are equal
19	to costs.
20	Q And a college or university wouldn't
21	necessarily do that?
22	A Not necessarily, no.
23	Q Is it correct, as a matter of economics,
24	that the more compensation that is offered for labor,
25	the more workers will be interested in providing that

1	labor?	
2	A	Yeah, we generally assume that, other
3	things the sa	me, higher wages would attract more
4	workers.	
5		But it's important to say "other things
6	the same."	
7	Q	Is coaching for a more competitive
8	Division I pr	ogram more attractive than coaching for
9	a less compet	itive program?
10		MR. STEWART: Object to the form.
11	A	Is that a question?
12	Q	Yes.
13	A	I didn't hear the first part.
14	Q	I'll ask it again, I'm sorry.
15	A	Okay.
16	Q	Is coaching for a more competitive
17	Division I pr	ogram more attractive than coaching for
18	a less compet	itive one?
19		MR. STEWART: Object to the form of the
20	question, ove	rbroad and speculative.
21	A	Well, I don't know. It might be for
22	some people,	maybe not for others.
23	Q	Coaches' preferences on the type of
24	program they	want to coach in differ from
25	coach-to-coac	h, fair to say?
		Page 57
	I .	

1	A Probably, yeah.	
2	Well, the ones I know anyway.	
3	Q As an economist, would it be your	
4	expectation that some coaches who were paid to be	
5	assistant coaches in the actual world would have been	
6	interested in applying for additional paid coach	
7	positions at more competitive programs if those	
8	positions existed?	
9	MR. STEWART: Same objections.	
10	A They might, sure.	
11	Q Is it correct, as a matter of economics,	
12	that the more compensation that is offered for labor	
13	in general, the more skilled the workers will be who	
14	are interested in that position?	
15	A No, that's not the way we normally think	
16	about it.	
17	Q Can can you explain why not?	
18	A Well, the higher the pay, the more	
19	anybody would prefer that job, other things the same,	
20	regardless of their skill.	
21	Q Is it possible that increasing	
22	compensation to a particular level would make people	
23	with certain skills interested in that position who	
24	wouldn't be interested in it at a lower salary?	
25	MR. STEWART: Excuse me.	

1 employer, if they pay -- if they set a salary level 2 at -- for one job that's twice the other job, that 3 they wouldn't expect the person who worked in the job getting twice as much to be more skilled? 4 5 Well, if they set the pay higher, they 6 could insist on higher skills, yes, but it would 7 still be the case that every worker, regardless of 8 skill, would prefer higher pay. 9 You have to distinguish between the preferences of the employer and the employee. 10 11 Understood. Q 12 I guess what I'm asking is, that if 13 the -- if the employer is going to pay \$150,000 to 14 the employee, they're going to want to get at least 15 \$150,000 in value or revenue from that employee, 16 right? 17 Α That's right. 18 And if the employer is paying only Q 19 \$75,000, they would demand that the worker provide 20 only -- at least 75,000 in value, right? 21 Α Yes. 22 So the more that an employer pays, the more value that they're going to demand from the 23 24 person they're employing? 25 Well -- yes, they need to always have --Α Page 60

1 that the benefits from the employment are bigger than 2 the costs, yes. 3 And so the more that employer pays, the 0 more benefit they would expect to get from the 4 5 employee they're paying? 6 Α Yes. 7 Is there a concept in labor economics Q 8 called a formal or systemic pay structure? 9 Α This actually is not so much in labor economics, but the idea of pay structures is 10 11 certainly -- formal pay structures is a part of what 12 is normally thought of as human resource, the 13 economics of human resources. Essentially, human resource analysis from the point of view of the firm. 14 15 And I use the term "formal" or "systemic 16 pay structure." Is that similar to the concept of a 17 rigid pay structure? There is some connection. I mean, the 18 Α 19 idea is that most big companies, universities too, 20 have formal pay structures, they're not rigid really, but they're formal. 21 Are you offering any opinion in this 22 0 case that there is a rigid pay structure for any 23 24 coach in any sport at any university? 25 Α No.

1 What does it mean to formalize a model 2 in economics? 3 Α Well, usually it means you write down equations, which I tried to avoid here. 4 5 I think you mentioned that earlier. 6 Are you familiar with the concept of 7 sample selection bias? 8 Α Yes. 9 0 What is that? Well, the famous example is the analysis 10 11 of the wage rates of married women, and the notion is 12 that if you wanted to measure the wage rate of 13 married women, if the wage itself determines whether or not they work, then your sample is selected based 14 15 on the wage rate, and the sample is then not a sample 16 of the total population, but of the population that has been selected. 17 There are many, many applications of it. 18 Just recently I saw one that had to do with land 19 20 prices. So, you know, we always think about land prices as determining valuations of properties, but 21 of course not every property sells all the time. 22 23 properties that do sell may not be representative of 24 the other properties in an area. 25 So am I right that the sample selection 0 Page 62

1	bias problem arises where there is some difference	
2	between the population reflected in the data that	
3	you're looking at and the population that you're	
4	trying to study?	
5	A Yes.	
6	That is actually a pretty good way to	
7	put it.	
8	I don't know who wrote that down for	
9	you, but	
10	MR. STEWART: Don't flatter him, please.	
11	Q Nobody.	
12	My economist team is going to be through	
13	the over the moon.	
14	Is Jim Heckman one of the leading	
15	scholars of sample selection bias?	
16	A Yes.	
17	Q Jim Heckman won the Nobel Prize in	
18	economics in part for his work on addressing the	
19	problem of sample bias?	
20	A That is right, one of our fine	
21	graduates.	
22	Q And can you think of a paper regarding	
23	sample selection bias that reflects an accepted	
24	treatment of that issue?	
25	A Well, his early paper on this topic	
	Page 63	

1 probably is -- is -- which was about married women in 2 the labor force is probably an example. 3 Is that his paper, "Sample Selection 0 Bias as a Specification Error"? 4 5 I think that paper is a different one. I think that paper is a more theoretical paper, but 6 I -- he wrote a lot of papers. 7 8 Heckman's paper, "Sample Selection Bias 0 9 as a Specification Error, " that is a very famous paper in labor economics, right? 10 11 Yes. Α 12 And is it important in labor economic Q 13 analysis to avoid sample selection bias? 14 Α Yes. 15 Well, it depends on what your problem 16 If -- if -- if the group that you have data on is the group that you want to study, then there is 17 not an issue, but if the group that you're studying, 18 19 as you said earlier, does not represent completely 20 the group -- the population you're interested in, then of course it's an issue. 21 22 And what can happen as a result of a sample selection bias problem? 23 24 Α Well, if you're estimating -- let's take the sample of regression coefficients. 25

1 If you're estimating regression 2 coefficients, it could be that their estimates are -are biased. 3 4 0 Have economists developed tools to 5 address sample selection bias? 6 Yeah, Heckman, in fact, that paper you mentioned, basically -- the clever aspect of it is 7 8 that specification bias is a kind of standard problem 9 in regression analysis, and fearing out that sample selection could be thought of as the same thing, as 10 11 omitted variables. That is the clever part of what 12 he found, clever part of the paper. 13 And so following Heckman, the labor Q economics field has developed tools to try to address 14 15 the problem of sample selection bias? 16 Well, that is kind of an open question, 17 whether or not we've successfully developed tools. In other words, there are tools, but it's kind of an 18 19 open question as to how successful they are. A lot 20 of people don't think they're very successful, which 21 has led to what is now more common, which is actually 22 field experiments. 23 So there are -- in order to avoid the 24 problem of selection bias, what you can do is actually design an experiment in which you randomize 25

1 In other words, if you're thinking about jobs where 2 -- for example, I guess it's construction, where from day-to-day you're not a hundred percent sure you can 3 work, that can affect the wage. 4 5 He has one, too, called "trust," 6 where -- this is another idea that actually has been 7 elaborated on by others. The idea is that you pay a 8 premium, because if someone loses their job, so you 9 pay a premium to what they otherwise would get 10 because you want to have them be trustworthy, and the 11 idea is that if you catch them doing something that 12 when you fire them they can't get a job equal to the 13 one they already have, so that takes into account the 14 fact that they shouldn't steal from you, or whatever 15 it is. 16 There is ten of them. I have forgotten 17 all of them right now. We could dig it out. 18 Q Would a worker's experience affect their 19 earnings? 20 Α Yes, could, definitely. 21 0 Would a worker's tenure at a particular employer affect their earnings? 22 23 It could also. Α 24 Could a worker's skill affect their Q 25 earnings?

Ou	5C 1.20 CV 00-25 VVD0	OSK Document 120 2 Filed 02/13/23 Fage 22 01 113
1	A	Yes.
2	Q	Could a worker's specialization affect
3	their earnin	gs?
4	A	It could.
5	Q	You mentioned human capital theory
6	earlier.	
7		Is human capital theory standard in
8	labor econom	ics?
9	A	It's become just the norm, yeah, it's
10	one of the topics we always cover.	
11	Q	Have you taught human capital theory?
12	A	Yes.
13	Q	Have you applied human capital theory in
14	your own pub	lished work?
15	A	Yes.
16	Q	What are some of the foundational papers
17	in human cap	ital theory?
18	А	Well, I like to think that the most
19	important on	e is by Jacob Mincer, but there is a
20	famous one b	y Gary Becker too.
21	Q	Is that
22	А	Mincer is "Income Earnings and" I
23	think it's c	alled "Income Earnings and Ability," a
24	very famous	book.
25	Q	And Jacob Mincer also wrote a famous
		Page 72

1	paper called "Family Investments in Human Capital"?
2	A I think he has, yes.
3	Q And that established something called
4	the Mincer earnings function?
5	A Well, the Mincer earnings function was
6	in that little book I mentioned, that is where it
7	really comes from. I think it's called "Income
8	Earning and Ability," but I'm not exactly sure of the
9	title. It's a little book.
10	Q For the court reporter's benefit, Mincer
11	is M-I-N-C-E-R, correct?
12	A Yes.
13	Q And the Mincer earnings function is one
14	of the most famous functions in modern economics?
15	A In economics, actually.
16	Q And Mincer's work revolutionized labor
17	economics?
18	A I wouldn't say he did it all by himself,
19	there were lots of other people, but he certainly was
20	a pioneer early. He did work, I think, on
21	determinants of workers' earnings very early.
22	Q And the Mincer earnings function has
23	been used in hundreds of studies in economics?
24	A Maybe thousands.
25	Q And you have used the Mincer earnings
	Page 73

1	function in your own published work?
2	A Yes.
3	Q What are the inputs to earnings
4	according to the Mincer human capital function?
5	A Well, his the two there have been
6	things added to this, but the two kind of starting
7	points are schooling, now there's all kind of issues
8	about how you measure that, and experience, also
9	issues about how to measure that.
LO	Q And would you agree that standard human
L1	capital theory links an individual's earnings to
L2	their level of education, job experience, and
L3	industry experience?
L 4	A Certainly to their to their
L5	somehow measure of their skills, which is often taken
L6	as measured by schooling, and certainly different
L7	aspects of experience could matter, yeah.
L8	It just depends. Some aspects of
L9	experience are more important than others.
20	Q And it's standard in labor economics
21	that an individual's earnings will depend on their
22	skills and their experience?
23	A Yes.
24	Among other things. That is not all.
25	Among other things.

1 And it's well-known among economists 2 that age has an independent effect on worker earnings, right? 3 Well, that is debatable. A lot of 4 Α 5 people think that the effect of age is the same as experience. Often it's not possible to measure the 6 7 two separately. 8 So in Mincer's early work, in fact, he 9 measured experience by using age minus school, minus school leaving date, but sometimes you can measure 10 11 experience directly, and sometimes you can measure 12 experience in different -- in different occupations 13 or different companies differently, it just depends what you could measure. 14 15 But it's common for economists to 16 measure how age affects earnings as a way of trying 17 to estimate how experience affects earnings? 18 Α That is usually thought of as a proxy 19 for that, yes. 20 And that is because workers develop experience in human capital over time? 21 22 Yes, because normally experience, as you Α 23 get older, you hopefully have more experience. 24 Sometimes that is not true because some people get 25 older and drop out of the workforce and they don't Page 75

1	have more experience, so that's why it's you know,
2	ideally you want to measure experience rather than
3	age, and it's debatable whether or not age has an
4	independent effect on pay.
5	There aren't very many data sets where
6	you could measure both of those well.
7	Q And age and previous earnings are good
8	summary measures of a worker's cumulative experience?
9	A Well, that would be very indirect, that
10	is not the Mincer analysis.
11	The Mincer analysis relies on measures
12	of skills, normally proxied by schooling, and some
13	kind of measure of experience and perhaps experience
14	at the current employer.
15	MR. STEWART: Could I hear that question
16	again?
17	MR. RAPHAEL: Sure.
18	(Whereupon, the requested portion is
19	read back by the reporter.)
20	MR. STEWART: Thank you.
21	A And I said, basically, no.
22	MR. STEWART: That was a professorial
23	no.
24	Q You wrote a paper published in 1978
25	called "Estimating the Effect of Training Programs on
	Page 76

1	Earnings"?
2	A Yes.
3	MR. RAPHAEL: Let's mark this as 70.
4	(Whereupon Estimating the Effect of
5	Training Programs on Earnings Article is received and
6	marked as Exhibit 70 for identification.)
7	A This is why a lot of people think
8	differences was invented. At least I think it was.
9	Q All right. So Exhibit 70 is an article
10	that you wrote called "Estimating the Effect of
11	Training Programs on Earnings," correct?
12	A Yes.
13	Q And what journal was this published in?
14	A It's in The Review of Economics and
15	Statistics.
16	Does it say on the bottom? I'm not
17	sure.
18	Q So if you could go to page 49 of this
19	article.
20	A Oh, it's on the top.
21	Q Do you see in the column on the left in
22	the second paragraph, you say, "At the most
23	rudimentary level, surely any theory of the
24	determination of earnings will imply that current
25	earnings are the result of a variety of historical
	Page 77
	Page //

1	factors, such as education, experience, social class
2	and others that influence earnings capacity."
3	Do you see that?
4	A Uh-huh.
5	Q And that is correct as a statement of
6	economics?
7	A I think so, yes.
8	Q And the next sentence says, "Moreover,
9	good summary measures of this cumulative experience
10	for a worker are surely his age and previous
11	earnings."
12	Do you see that?
13	A Yes.
14	Q And that is correct as a statement of
15	economics?
16	A I think it's it's a good way to
17	summarize what was useful in this context, yes.
18	Q You can put that aside.
19	You testified as an expert in
20	discrimination cases?
21	A I have.
22	Q And as an expert in discrimination cases
23	you've conducted an analysis of how workers' race or
24	gender affected their earnings, right?
25	A Yes.
	Page 78

1	Q And in analyzing how workers' race or
2	gender affected their earnings you controlled for
3	factors such as the worker's experience or age,
4	right?
5	A Yes.
6	Q How does an economist define the but-for
7	world in an antitrust case?
8	A Well, it's the what would have
9	occurred in the absence of the alleged behavior.
10	Q Let me just go back and ask you: In the
11	discrimination cases where you controlled for factors
12	such as workers' age and experience, why did you do
13	that?
14	A The reason for control variables is to
15	make sure that what you're in the context of race
16	or gender differences, the goal is to measure what
17	the differences are that are not accounted for by
18	characteristics that are established prior to
19	entering the labor market.
20	Q So you you the goal was, where
21	you're trying to measure the effect of a certain
22	behavior on earnings, you were trying to ensure that
23	you weren't just measuring the effect of the worker's
24	skills or experience on their earnings, right?
25	A Yes, the issue if skill if age or
	Page 79

1	schooling level or whatever are correlated with
2	gender or whatever thing you're trying to measure,
3	then you need to control for them.
4	The general view is that you control for
5	the things that people bring to the labor market, not
6	the things that they that are a result of the
7	discrimination in the first place.
8	Q Incentives are very important in
9	economics. Would you agree with that?
LO	A Yes.
L1	Q And should an economist modeling the
L2	but-for world assume that all of the participants in
L3	the market would act in accordance with their
L4	economic incentives?
L5	A Generally, I would I would say that
L6	is the common way to do it, although there are
L 7	that is challenged now in many places, called
L8	behavior economics.
L9	Q Did you apply behavioral economics in
20	your work in this case?
21	A No.
22	Q Should an economist modeling the but-for
23	world account for how competition would have
24	increased without the challenged restrain?
25	A Well, I think that is the purpose of
	Page 80

1	most analyses, yes.
2	Q In modeling the but-for world in this
3	case have you assumed that coaches who worked as
4	volunteers would have negotiated their salaries?
5	A I haven't said how their salaries would
6	be set, just that there would be a normal market
7	price, a relative wage that would be appropriate to
8	them. How that got arrived at, I haven't really
9	specified in the report.
10	Q So you haven't made an assumption, one
11	way or the other, about whether in the but-for world
12	coaches would have negotiated their salaries?
13	A I didn't I didn't I didn't really
14	analyze how they would determine their salaries, just
15	to estimate what I thought the result would be.
16	Q In modeling the but-for world in this
17	case have you assumed that the NCAA bylaws, as they
18	existed after July 1 of 2023, would have been in
19	place during the class period?
20	MR. STEWART: Object to form of the
21	question, overbroad.
22	A That is the goal, yes.
23	Q Have you made any assumption in modeling
24	the but-for world in this case about when the bylaws
25	regarding limits on the number of paid coaches that

Veritext Legal Solutions Calendar-CA@veritext.com 866-299-5127

1 exist today would have gone into effect? 2 Well, I guess it depends on what you Α 3 mean by "go into effect." 4 In the analysis we've used the post --5 the period when the rules were changed to get at the but-for world, but I think I did say in the report in 6 7 many places that it's not entirely clear that at the 8 point that we collected our data that the markets 9 were -- that the positions and markets were fully 10 reflective of what would happen absent the -- absent 11 the rules. 12 I think I'm asking a slightly different O 13 question. So when in your -- in the but-for world 14 15 that you have modeled would the NCAA bylaws regarding 16 limits on the number of paid coaches that exist today 17 have gone into effect at the start of the class period or sometime before that? 18 19 Α Oh. 20 I think -- the only analysis I have done is of the class period, as far as I -- that is the 21 22 best I could recall. 23 Q Okay. 24 You have not assumed that in the but-for world that you have modeled that the NCAA bylaws that 25 Page 82

1 exist today regarding the number of paid coaches on a 2 team would have gone into effect at any time prior to the class period? 3 4 Α I don't think that's an assumption I 5 made, no. 6 In modeling the but-for world in this 7 case you have assumed that there would be limits on 8 the number of paid coaches that Division I schools 9 could have hired in each sport, correct? 10 Α Yes. 11 And, in your view, is there anything Q 12 anticompetitive about NCAA bylaws limiting the number 13 of paid coaches on a team in each sport? 14 MR. STEWART: Again, I'm going to 15 object. You're going beyond what's in his report, 16 the opinions in his report, and you're asking for 17 generalized opinions on something else, where the report clearly says that -- well, go ahead, I'm going 18 19 to object that, again, you're going beyond the scope. 20 Α Actually, he said it for me. I was asked to assume that the -- that 21 22 the number of coaching slots was determined by the 23 NCAA rules and not to ask what would happen if they 24 weren't. So that goes beyond the -- as Dennis said, that goes beyond the scope of my report, I wasn't 25

1	asked to have an opinion about that question.
2	Q Are you offering any opinion that the
3	limit of on the number of paid coaches in each
4	sport that you have assumed would have existed in the
5	but-for world was anticompetitive?
6	A No.
7	Q So the but-for world that you've modeled
8	in this case is one where there is a maximum number
9	of transactions that could have taken place for
10	hiring coaches in Division I, right?
11	A Yes.
12	Q And that maximum number of coaches who
13	could have been hired in Division I in the but-for
14	world that you modeled could be lower than the
15	equilibrium number of coaches in a completely
16	unfettered market, right?
17	A Or higher, that is possible, sure.
18	Q Now, in cases involving fixing the price
19	of consumer products would an economist model the
20	but-for world where the number of transactions is
21	capped?
22	A I don't think the number of transactions
23	would really play a role in in in a typical
24	consumer behavior case.
25	Q In any other case that you have worked
	Page 84

1	on has the number of transactions in the market in
2	the but-for world been capped?
3	A I don't think so.
4	Q Are you offering any opinion on what
5	percentage of the athletics budget any Division I
6	college or university would have needed to pay the
7	salaries that you estimate would have been paid in
8	the but-for world?
9	A No, I haven't tried to calculate any
10	such thing.
11	Q Do you think you could have calculated
12	that?
13	A I don't know, it would depend on what
14	assumptions you wanted to make.
15	I don't know, it's possible, but I don't
16	know.
17	Q Are you offering any opinion on the
18	amount of revenue that any athletics department in
19	Division I would have earned in the but-for world?
20	A No.
21	Q Are you assuming that every athletics
22	department in Division I would have earned the same
23	amount of revenue in the but-for world?
24	A No, I haven't made any assumption about
25	revenue.

1	paid coach in every sport where they hired a
2	volunteer in the actual world, correct?
3	MR. STEWART: Objection to the form.
4	A Oh, no, I said most I predict I state
5	very explicitly in the report that I think that most
6	would have, yes.
7	Q But most is not all, correct, sir?
8	A Most is not all, that's true.
9	Q Right.
10	So is it your opinion that all
11	Division I schools would have hired an additional
12	paid coach in every sport where they hired a
13	volunteer in the actual world?
14	A I think I said most, not necessarily
15	all.
16	MR. STEWART: Excuse me.
17	I missed an opportunity to pose an
18	objection both with respect to the incompleteness of
19	the hypothetical and the irrelevance of the question
20	based on rulings in the case.
21	Q Because it is not your opinion well,
22	strike that.
23	You agree that some Division I schools
24	would not have hired an additional paid coach in some
25	sports where they hired a volunteer in the actual

1	world, correct?
2	MR. STEWART: Same objections. We
3	already have a ruling on this.
4	A I think I said most would, that is what
5	my opinion is, based on and I state in the report
6	why that is.
7	Q And some schools would not have hired
8	additional paid coaches in all sports where they
9	hired a volunteer, right?
10	A It's possible, but as I state, my
11	statement was that most do, would.
12	MR. STEWART: Again, just interpose,
13	because I didn't get a chance, the same objections.
14	Q And "most" does not mean "all," correct?
15	A Yes, that's true.
16	Q Can you think of any reason why
17	volunteer coaches who were members of the class could
18	have been better off in the actual world than they
19	would have been in the world where the current NCAA
20	bylaws were in place?
21	MR. STEWART: Object to the form of the
22	question, vague.
23	A I am having a hard could you repeat
24	that?
25	Maybe there seems to be three
	Page 90

1	Q I understand it as slightly different,
2	but I would appreciate your answer.
3	MR. STEWART: Okay, same objections.
4	Go ahead.
5	A What I said was that I think most would
6	have been hired, but not necessarily every single
7	one.
8	Q You teach at Princeton. Did you
9	investigate anything about volunteer coaches at
10	Princeton?
11	A No, no, I didn't.
12	Q So you didn't investigate whether
13	Princeton hired additional paid coaches in all sports
14	where it hired volunteers?
15	A No, I didn't.
16	Q Did you know that Princeton designated
17	additional paid coaches that it hired after the
18	bylaws were changed as casual assistant coaches?
19	A No.
20	Q Can you explain to me how any Division I
21	college or university funds its athletic department?
22	A I couldn't quite hear the last part of
23	your sentence.
24	Q Can you explain to me how any Division I
25	college or university funds its athletic department?
	Page 95
	rage 93

1 Α Oh. 2 Well, as I said, I haven't been involved in athletic departments, so I'm not -- I have no idea 3 exactly how they do it. 4 5 I know they have -- there is an 6 elaborate aspect of recruiting student athletes as 7 well as coaching staff as well as amenities for the 8 students in some ways to help them, so I have a vague 9 understanding of how athletic activity operates at the university, but I have never been involved in the 10 11 administration of the athletic department. 12 So you can't tell me how Princeton or 0 13 any other college or university funds its athletic department? 14 15 Well, I assume that there is various Α 16 forms of funding, everything from gifts to general 17 revenues to actually even ticket sales, of which we have some. 18 19 But you couldn't explain to me how any Q 20 particular college or university funds its athletic 21 department? 22 Α No. Other than the general understanding of where their revenues must come from, 23 24 I don't have the detailed analysis. 25 And different colleges and universities 0 Page 96

1	fund their athletic departments in different ways,
2	right?
3	MR. STEWART: Object to the form of the
4	question. He just told you he doesn't know, but go
5	ahead.
6	A I don't know, but I'm sure that there
7	are some differences, yes.
8	Q Do you know whether some Division I
9	colleges and universities fund their athletic
10	departments through taxpayer funds?
11	A Oh, I don't know.
12	Q Do you know whether colleges and
13	universities fund their athletic departments through
14	revenues earned by the department?
15	A Well, I'm sure some do.
16	By the way, even including the taxpayer
17	funds, it's become an issue in New Jersey with
18	Rutgers.
19	I'm sure there are some, but I have no
20	detailed analysis, no detailed knowledge about that.
21	Q Do you know whether or not any colleges
22	or universities require approval from the state
23	government to hire personnel?
24	A I don't know.
25	Q So you didn't investigate how any
	Da ~ 2 07
	Page 97

1 Division I college or university funds its athletic 2 department? 3 Α That's right. Why not? 4 Q 5 MR. STEWART: Well, no. 6 Come on, Justin. Again, you're going 7 beyond -- you're getting into work he didn't do and 8 why he didn't do work, and the proper area of inquiry for an expert is what he did do and what the basis 9 for his opinions are, what his opinions are, so I 10 11 think, again, you're in violation of Rule 26. 12 MR. RAPHAEL: I totally disagree. think what Professor Ashenfelter didn't do is 13 entirely relevant to the reliability of his opinions, 14 15 and so I would like an answer to my question. 16 Why did you not investigate whether --17 how any Division I college or university funds its athletic department? 18 19 Well, that wasn't part of my -- of my --Α 20 what I was asked to do, it wasn't part of my mission. 21 Do you think funding for athletic 22 departments is relevant in any way to the opinions 23 that you've expressed in your report? Not directly relevant, no, I don't think 24 Α 25 so.

1	Q Why not?
2	A Well, what I was asked to do was to try
3	to determine to find a method for determining what
4	the wage rate would be for coaches whose who were
5	classed as volunteers and to establish whether that
б	market wage was positive as well as whether or not I
7	thought that most of the former coaches would have
8	been paid.
9	So my my what I was asked to do
10	didn't involve no one asked me to try to figure
11	out how you would finance or not finance any of these
12	pay structures.
13	Q But is the amount of funding that
14	athletic departments had relevant to the market wage
15	that coaches would be paid by those colleges and
16	universities?
17	A I'm sure it would be, yes.
18	Q But you didn't think to look at that in
19	connection with your analysis of the market rate,
20	right?
21	A No.
22	The the market rate I determined by
23	using relative pay structures.
24	Q Did you investigate the impact, if any,
25	of Title IX or gender equity concerns on athletic
	Page 99

1	departments?
2	A No.
3	Q And so you didn't take that into account
4	in your analysis, correct?
5	A No.
6	We do distinguish between men's and
7	women's teams and coaches, but there's not not an
8	explicit analysis of anything associated with that.
9	Q Did you investigate the process that
10	Division any Division I college or university uses
11	to approve adding personnel?
12	A No.
13	Q And so you couldn't explain to me the
14	process that any Division I school uses to add paid
15	personnel, right?
16	A I have not investigated that question.
17	Q Did you investigate how any Division I
18	college or university determines how to allocate its
19	athletics budget?
20	A No.
21	Q So you can't explain to me the factors
22	or process that any Division I school uses to
23	determine how to allocate its athletics budget?
24	A I haven't studied the administration of
25	athletic departments anywhere.

Veritext Legal Solutions Calendar-CA@veritext.com 866-299-5127

1	Q You have not studied administration of
2	any Division I athletic department, correct?
3	A Yes.
4	Q Would it be your expectation that
5	different colleges and universities have different
6	priorities and processes for allocating their
7	athletic budget?
8	A Yes.
9	Q Would it be your expectation that
10	different Division I schools have different
11	constraints on their ability to add paid personnel?
12	A They may have, yes.
13	Q Did you investigate whether different
14	Division I colleges and universities prioritize
15	different sports?
16	A I did not study that question, no.
17	Q And so you don't know whether any
18	Division I school prioritizes any sport more than any
19	other Division I school, right?
20	A Well, that is going a little too far.
21	Q All right.
22	Maybe we'll get a little more specific
23	then.
24	You don't know whether the United States
25	Naval Academy or Fresno State University values
	Page 101

1	women's volleyball more than their other sports,
2	right?
3	A Correct.
4	Q And the reason you don't know that is
5	because to understand that you would have to ask the
6	Naval Academy and Fresno State, right?
7	MR. STEWART: Object to the form.
8	A I have to analyze, yes, you have to find
9	some way to analyze. I don't know if you have to ask
10	them, but you have to find some way to analyze what
11	their interests are.
12	Q Would it be your expectation that if
13	different colleges and universities prioritize
14	different sports, that that could affect their budget
15	allocations?
16	A I'm sure it could, yes.
17	Q As an economist, could you think of any
18	way to determine how different colleges and
19	universities would allocate their athletic budgets in
20	the but-for world?
21	A Well, I think I explained it. I haven't
22	done any study of the way that athletic departments
23	are administered, and other than general knowledge
24	about revenue sources that I think almost everybody
25	would associate with the university, I don't have any
	Page 102

When you say "most of them would have 1 2 hired someone," are you saying that most of the schools would have added a paid position in all of 3 the sports where they used a volunteer without saying 4 5 anything about who would have gotten that position? 6 MR. STEWART: Again, I'm going to 7 incorporate my prior objections. 8 Α Right, I'm not trying to say who they 9 would hire, but, yes, they -- they -- I believe they would have hired -- most of them would have hired 10 11 someone in that position. 12 I'm sorry, paid someone in that position 13 I guess is a better way to say it. 14 Q Right. 15 And then just to make sure we're clear, 16 so your opinion is that most but not all of the 17 Division I schools would have hired someone with pay for the position that they hired volunteers for, 18 19 right? 20 Α Yes. MR. STEWART: Same objections. Excuse 21 22 me. 23 Yes, that is right. Α 24 And just to make sure we're clear again, 0 have you offered the opinion that most of the schools 25 Page 105

1	that would have hired someone with pay, are you
2	offering the opinion that all of the people who would
3	have been hired for those paid positions would have
4	been the same people who were the volunteers in those
5	positions?
6	MR. STEWART: Excuse me.
7	Object to the form of the question, and
8	that the question is legally irrelevant.
9	A Well, it's not I don't know who they
10	would actually hire into those positions.
11	Q Can you explain to me the skills or
12	attributes that any Division I well, let me back
13	up on that.
14	You're not offering an opinion on the
15	identity of the coach who would have been hired for
16	any particular paid position in the but-for world?
17	MR. STEWART: Object to the form of the
18	question and and incorporating my prior objections
19	on relevance.
20	THE WITNESS: You want me to answer
21	that?
22	MR. STEWART: Sure.
23	THE WITNESS: Okay.
24	A I have assumed that the well, the
25	people that were injured by the collusion were the
	Page 106

1	about what future hiring there is.
2	So the but-for world is a made-up world
3	in the sense that it's what we think would have
4	occurred absent the collusion, and that is what I
5	have assumed for that, which is that those people,
6	most, would have been in positions that were paid, or
7	I have shown that, more or less. At least I made
8	several arguments to try and make that clear.
9	Q Have you investigated the skills or
10	attributes that any Division I head coach during the
11	class period believed were most important for
12	assistant coaches on their staff?
13	A No.
14	Q Would it be your expectation that some
15	head coaches would value different skills or
16	attributes differently in the assistants they hire?
17	A I imagine they might.
18	Q And would it be your expectation that
19	some head coaches might value experience playing the
20	sport more than experience coaching the sport?
21	A It's possible, I suppose. I don't know.
22	Q And some coaches might value coaching
23	experience more than playing experience, right?
24	A That's possible. I don't know.
25	Q So you can't you can't explain the
	Page 109

1	MD CTEMADT. I am not
1	MR. STEWART: I am not.
2	A Okay, what was the question, remind me?
3	Q The question was, did you notice in
4	Dr. Rascher's report that he has a model for
5	predicting whether a Division I baseball program
6	would have added an additional paid assistant coach
7	position in the but-for world?
8	A I know he I'm not sure if that is
9	what he did, but I know he had a probit analysis to
10	try to predict hiring, but that is all I that is
11	what I took away from that and that is it. I'm not
12	sure exactly how he used it.
13	Q Does your does the model you built in
14	this case predict whether a college or a university
15	would have hired an additional strike that.
16	Does the model that you have put forward
17	in this case predict whether a Division I college or
18	university would have added an additional paid
19	position in the but-for world?
20	A No, the model doesn't do that, no.
21	The regression model doesn't do that.
22	Q Does any model you've done in this case
23	do that?
24	A Yes. I've argued that all the evidence
25	is that most of the of the positions
	Page 123

1	A Well, you may recall in a little earlier
2	discussion we we have some folks for whom we've
3	calculated that they wouldn't have been paid, so
4	that's that's not quite right to say that it
5	doesn't predict anything, but it does it is
6	designed it's not designed to predict that.
7	Q Right.
8	A But to the extent that the relative
9	wages are such that the appropriate assistant coach,
LO	for comparison, doesn't get paid, then we assume that
L1	that person wouldn't be paid.
L2	Q Your step-down model is not designed to
L3	predict whether any Division I school would have
L 4	added a paid position to their personnel roster in
L 5	the but-for world, correct?
L6	A Yes.
L7	MR. STEWART: Justin, when you get a
L8	point, we've been we had kind of an early start, I
L9	think probably lunch break at a convenient spot would
20	make sense.
21	MR. RAPHAEL: Sure.
22	Maybe we could maybe, like, ten
23	minutes.
24	MR. STEWART: Sure.
25	Is that okay with you, Doctor?
	Page 125

1	that point.
2	Q Do you have an estimate of how long it
3	will take for the market to adjust to an equilibrium?
4	A I don't actually try to estimate what
5	that would be.
6	I don't I don't know.
7	That is a good question, how long it
8	would take. I don't know the answer to that, but I
9	don't think it would happen immediately.
10	Q Just a few more questions and then we'll
11	take a break.
12	So after July 1, 2023, when the amended
13	bylaws went into effect, most Division I colleges and
14	universities did not hire an additional paid coach in
15	most sports where they had hired volunteers, right?
16	A I think that's right, yes.
17	Q Of all the Division I sports programs in
18	which
19	A Well, maybe most is not right, but
20	certainly majority didn't.
21	MR. STEWART: I'm going to object to the
22	form of the question, it's incomplete and vague.
23	Q So after July 1, 2023, when the bylaws
24	were amended, most Division I that is exactly what
25	I meant not to do.

1 After July 1, 2023, when the amended 2 bylaws went into effect, the majority of sports programs in Division I that hired a volunteer during 3 the class period did not hire an additional paid 4 5 coach, right? 6 Α I think that's true, yes. 7 MR. STEWART: Objection. 8 Of all the Division I sports programs in 0 9 which a college or university hired a volunteer coach during the class period, what percentage of those 10 11 programs hired an additional paid coach after the 12 bylaws were amended? 13 MR. STEWART: Object to the form of the 14 question. 15 That is a knowable question, but I don't Α 16 actually have it in front of me, or here, unless 17 it's -- I don't think it's in the report, actually, but there are some numbers that would lead you in 18 that direction in the report itself. I don't think 19 20 we actually calculate that number. 21 In other words, you could calculate that 22 percentage, but you didn't do that in the report? I don't think that number is in the 23 Α 24 report, but you can certainly do that from the data 25 we have.

1	Q Now, are those reasons affirmative
2	evidence that all colleges and universities in
3	Division I would have paid additional coaches in
4	every sport during the class period?
5	MR. STEWART: Object to the form of the
6	question, vague.
7	A Well, they're offered not for that
8	purpose, they're offered for the purpose of
9	explaining why to try to explain why you might see
10	like adjustment.
11	Q So the reasons that you mentioned about
12	why schools didn't hire the reasons you mentioned
13	why schools might not have hired additional coaches
14	in every sport after the bylaws were amended are
15	explanations for the data that you see after the
16	bylaws were amended?
17	MR. STEWART: Object to the form of the
18	question.
19	A Yes.
20	Q Now, is it your testimony that the three
21	reasons you identified why some programs may not have
22	hired additional paid coaches after the bylaws were
23	amended explain why every program that didn't hire an
24	additional paid coach made that decision?
25	A No, and I don't think these these
	Page 132

reasons are -- are the only reasons why -- there may 1 2 be other reasons too -- why adjustment is slow. Well, I quess, can you think of any 3 0 reason why a school may not have hired an additional 4 5 paid coach after the bylaws were amended that is not a reason why adjustment was slow? 6 7 Well, I mean, there are all kind of Α 8 possibilities. A sport could get dropped. A school 9 could pull out of the NCAA. These all happened. Not necessarily this time period. 10 11 Those are all reasons why the slow 12 adjustment might be different from what you'd expect 13 employment to be in the -- in the -- the absence of the alleged collusion. 14 15 I guess what I'm asking is, does slow 16 adjustment explain why every school that did not hire 17 a paid coach in a particular sport after the bylaws were amended made that decision? 18 Well, I think I said I don't think those 19 Α 20 are the only reasons, there may be others. So other than slow adjustment, what 21 22 could explain why some schools did not hire 23 additional paid coaches after the bylaws were 24 amended? 25 MR. STEWART: Objection, asked and he Page 133

1	just answered.
2	A Well, I guess the problem with the
3	question is how many are not we don't know yet at
4	this point how many schools haven't hired paid
5	coaches into those long-term positions, so maybe they
6	will all hire them.
7	Q And maybe they won't, right?
8	A Well, we have no way of knowing for
9	sure, but it seems likely there will be many more
10	hired than had been in the initial period, and that's
11	really what I what I refer to with these reasons.
12	Q So is it your expectation as an
13	economist that well, let me strike that.
14	I think you said earlier you don't have
14 15	I think you said earlier you don't have any estimate of how long it will be until the market
15	any estimate of how long it will be until the market
15 16	any estimate of how long it will be until the market reaches equilibrium, right?
15 16 17	any estimate of how long it will be until the market reaches equilibrium, right? A That is correct.
15 16 17 18	any estimate of how long it will be until the market reaches equilibrium, right? A That is correct. Q And is it your prediction as an
15 16 17 18	any estimate of how long it will be until the market reaches equilibrium, right? A That is correct. Q And is it your prediction as an economist that when the market does reach equilibrium
15 16 17 18 19 20	any estimate of how long it will be until the market reaches equilibrium, right? A That is correct. Q And is it your prediction as an economist that when the market does reach equilibrium that every school that hired a volunteer in the
15 16 17 18 19 20 21	any estimate of how long it will be until the market reaches equilibrium, right? A That is correct. Q And is it your prediction as an economist that when the market does reach equilibrium that every school that hired a volunteer in the actual world will hire an additional coach in that
15 16 17 18 19 20 21 22	any estimate of how long it will be until the market reaches equilibrium, right? A That is correct. Q And is it your prediction as an economist that when the market does reach equilibrium that every school that hired a volunteer in the actual world will hire an additional coach in that sport?
15 16 17 18 19 20 21 22 23	any estimate of how long it will be until the market reaches equilibrium, right? A That is correct. Q And is it your prediction as an economist that when the market does reach equilibrium that every school that hired a volunteer in the actual world will hire an additional coach in that sport? A I don't know.

1	A That is not what my report is about, no.
2	Q Right.
3	So you're not offering any opinion about
4	whether when the market is in equilibrium every
5	Division I program hires an additional paid coach in
6	every sport where it hired a volunteer, right?
7	A No, that is not what I was asked to
8	analyze, and I haven't.
9	Q And so you have no opinion on that,
10	right?
11	A I have not reached an opinion on that,
12	yes.
13	The data are out, or the data are still
14	out, I guess you might say.
15	Q Well, you haven't reached an opinion on
16	that, though, based even on other types of economic
17	evidence, right?
18	You don't have any opinion on that, one
19	way or the other?
20	MR. STEWART: Excuse me.
21	What is that again?
22	Q Well, you said the data are out, and I'm
23	asking you, do you have an opinion, based on any type
24	of economic evidence whatsoever, about when the
25	market reaches equilibrium, whether that equilibrium
	Page 135

1 is one where every school that hired a volunteer 2 during the class period hires an additional paid coach in that sport? 3 I don't know whether that will be the 4 Α 5 case, no. 6 And are you offering any opinion as to 7 why any particular Division I sports program didn't 8 hire an additional paid coach after the bylaws were 9 changed made that decision? 10 Α No. 11 Did you investigate why any Division I 0 12 college or university that didn't hire an additional 13 paid coach after the bylaws were amended made that decision? 14 15 Well, we don't know what they -- what Α 16 decisions were made. 17 In other words, I think I tried to explain carefully in the report that we don't -- we 18 don't -- our data doesn't continue into far enough to 19 20 know what the ultimate outcome will be. It will certainly take another year, maybe many, many more. 21 22 So the -- one aspect of this is that we do not have 23 the data at this point to say what that outcome is 24 going to look like. Even with two years of data, it

Page 136

25

would help.

1	hired a volunteer made that decision?
2	A Well, under pressure of time where there
3	were other things that needed to be done, it wasn't
4	something that was prioritized by anyone to do.
5	Q How much time do you think you would
6	have needed to do that?
7	MR. STEWART: Do what?
8	Objection, vague.
9	Q How much time do you think you would
10	have needed to figure out why each school that didn't
11	hire an additional paid coach in all of the sports
12	where it hired a volunteer during the class period,
13	why they made that decision?
14	MR. STEWART: Objection, vague and
15	ambiguous.
16	A It would be hard. You would obviously
17	have to depose people. So this is a legal question
18	
	that I really don't have the ability to answer.
19	that I really don't have the ability to answer. Q So to figure out why a school did not
19 20	
	Q So to figure out why a school did not
20	Q So to figure out why a school did not made a decision not to hire an additional paid coach
20 21	Q So to figure out why a school did not made a decision not to hire an additional paid coach in a particular program, you would have to depose
20 21 22	Q So to figure out why a school did not made a decision not to hire an additional paid coach in a particular program, you would have to depose that school?

1 be deposed. Don't you think? 2 You're a lawyer, I'm not the lawyer 3 here. You didn't -- you said that it's 4 Q 5 premature to ask the question of why the schools 6 didn't hire paid coaches. 7 Why do you say that? 8 Α Well, because I think what you want to 9 know is how many are not, in fact, going to do the 10 hiring, and there are many that we don't know whether 11 they did or didn't. 12 When you say you would want to know 0 13 whether they would do the hiring, do you mean when the market reaches equilibrium or for '23-'24? 14 15 No. I mean for -- when the market Α 16 reaches some equilibrium, what you would want to do 17 is to study -- you're the one who brought up sample selection. 18 19 What you want to make sure to do is to 20 study a sample that wasn't selected of those -- of 21 those schools that are in these categories, so that 22 would require a sample design, which presumably would 23 be based on the equilibrium outcome. 24 0 Can you explain a little bit more what you mean by "doing a proper sample design" in that 25

1	answer?
2	A Sure.
3	If you want to if there is a
4	population you would like to know the
5	characterization of, you typically draw a random
6	sample from that population and study it, and then
7	that way you know that you can infer what the
8	population looks like without without issues of
9	bias.
10	Q And that is a standard technique in
11	economics?
12	A Yes.
13	Well, it's a technique in all the
14	sciences basically, minimization. It goes back not a
15	long ways, but fairly far.
16	Q You didn't employ any randomized
17	sampling in this case, did you?
18	A No.
19	I guess I should say yes.
20	Q Let me ask it again for a clear record.
21	Did you employ any random sampling in
22	this case?
23	A No.
24	That is a correct no.
25	Q Why not?
	Page 143

Veritext Legal Solutions Calendar-CA@veritext.com 866-299-5127

1	A We we were lucky to get the
2	data we got in the time we had it, so it wasn't we
3	were taking everything we could get our hands on
4	because of the of the slow production of data in
5	the first place.
6	Q Any other reason?
7	A That's the reason.
8	Q Did you do anything to construct a model
9	as to why each Division I college or university that
10	didn't hire an additional paid coach after the bylaws
11	were amended made that decision?
12	A As I explained, I didn't try to explain
13	that with a model.
14	Q I think one of the reasons you mentioned
15	that might explain why some schools did not hire an
16	additional paid coach after the bylaws were amended
17	is that wages don't adjust immediately, right?
18	A Yes.
19	Q And I think one concept you mentioned, I
20	think, is is downward nominal wage rigidity?
21	A Yes.
22	MR. RAPHAEL: I'll pause for the court
23	reporter on that one.
24	THE COURT REPORTER: I got it.
25	Q And that's that's the idea that
	Page 144

1 employers find it difficult to reduce the wages of 2 people that they're already earning? 3 Α Yes. And so your expectation would be that if 4 0 5 schools were paying the coaches who volunteered in 6 the but-for world that they wouldn't take the money 7 that they were paying the other coaches on their 8 staffs and give it to the volunteer coaches, right? 9 Α Yes. Do you have any opinion on, if schools 10 11 weren't going to get the money to pay the coaches who 12 you say would have been paid from salaries of other 13 coaches, where they were going to get the money? Well, you asked me earlier about the 14 Α 15 sources of finances for these particular departments, 16 and I don't really know anything about the sources of 17 financing, so I really don't have a particular opinion about where those funds might come from. 18 19 Are you offering an opinion that all Q 20 Division I schools that hired volunteers during the class period could have afforded to hire additional 21 22 paid coaches in all the sports where they hired 23 volunteers? 24 MR. STEWART: Object to the form of the 25 question, vaque.

1 No, I didn't -- I didn't -- my report 2 doesn't deal with that topic. You didn't perform any study to 3 0 determine whether downward nominal wage rigidity 4 5 explains why any school did not add additional paid 6 coaching positions after the bylaws were amended, 7 right? 8 Α That is correct. You're just pointing out nominal wage 9 Q rigidity as a theory that could explain that? 10 11 Α As a general -- as kind of a general 12 finding, yes. 13 So you don't actually have the opinion Q 14 that downward nominal wage rigidity explains why any 15 school actually didn't hire additional paid coaches, 16 right? 17 I don't know why they didn't, based on 18 that alone, no. 19 And another reason you said, I think, O that schools may not have hired additional paid 20 21 coaches is that adjusting university budgets takes time, right? 22 23 Α Yes. 24 And I think you testified earlier that 25 you haven't studied how any university sets its Page 146

1	athletic budget, right?
2	A No. I have some general idea, of
3	course, because I'm at a university, but I haven't
4	really haven't studied the administration of the
5	university budgets.
6	Q So you're not offering any opinion then
7	that the time it takes for universities to change
8	their budget actually explains why any school didn't
9	hire additional paid coaches after the bylaws were
10	amended?
11	A I don't have a direct connection between
12	that, just offering that as one of the things to
13	explore.
14	Q Now, I think the third reason you
15	mentioned as to why schools may not have hired
16	additional paid coaches has to do with residual
17	collusion?
18	A Yes.
19	Q Have you seen any evidence that any NCAA
20	member institutions colluded with respect to the
21	assistant coach salaries after the NCAA bylaws were
22	amended?
23	A No.
24	Q And are you offering the opinion that
25	any NCAA member institutions colluded regarding
	Page 147

1	coaching salaries after the amended bylaws were
2	changed?
3	A No.
4	Q Economists have performed studies about
5	this concept of residual collusion?
6	A There's some evidence, yes.
7	Q You didn't perform any study in this
8	case about whether this notion of residual collusion
9	explains why any school did not hire additional paid
10	coaches after the bylaws were amended?
11	A That's correct.
12	Q Are you aware of any published studies
13	showing that not all colleges and universities make
14	all of the payments that they are permitted to make
15	to student athletes under NCAA bylaws?
16	A I don't I don't know.
17	I read a bunch of different things, but
18	I don't recall anything in that particular area.
19	Q Could you go to paragraph 54 of your
20	report, please.
21	MR. STEWART: I don't think he has the
22	final report, does he?
23	Q No. This is your original report.
24	A Okay.
25	Q I don't believe this is a paragraph
	Page 148

1	So when you testified earlier that all
2	members of the class were harmed, that is your
3	opinion, correct?
4	A Yes.
5	Q What do you mean by that?
6	A I mean that if someone was hired, they
7	must have produced output at least equal to what they
8	were paid.
9	So that output so if you think about
10	the usual marginal product of labor equals the wage
11	rate, that output would normally be compensated.
12	It's in that sense that I meant, it's a
13	very special sense, but it's in that sense I meant
14	that they were harmed.
15	Q So, in other words, members when you
16	say "all class members have been harmed," what you're
17	saying is that the universities received more value
18	than they paid?
19	A Yes.
20	Q And so but some some coaches even
21	on that measure of harm were not entitled to damages
22	I think you said?
23	A Yes.
24	The convention we used was that if the
25	assistant coach wasn't I'm sorry.

1 substitution issue that the court has already ruled 2 in this case is not going to be applied, but you can 3 answer the question. 4 MR. RAPHAEL: You can have a standing 5 objection so we don't have any more speaking objections. 6 7 Can you answer my question? Q 8 All depends on what they have been paid. Α 9 0 Right, but economics would indicate that the employer is going to hire the person for the 10 position with whom they get the biggest difference 11 12 between the marginal revenue and the marginal cost, 13 right? 14 Yes, that's true. Α 15 And so it could be that if there were 16 other applicants for the positions that the volunteer 17 coaches held who offered more revenue -- marginal revenue product than the marginal cost, their salary, 18 economics would say that the college would hire that 19 20 applicant rather than the volunteer? Well, in this situation that is probably 21 Α 22 true. 23 In a -- if the number of coaches was 24 unrestricted, then it would be -- anytime there was a 25 marginal benefit greater than cost, you would hire

1	the person.
2	Q Right, but your but-for world, sir,
3	assumes that the number of coaches is restricted,
4	right?
5	A That is correct.
6	Q Okay. So in a but-for world in where
7	the number of coaches is restricted, economics would
8	say that if there is an applicant whose marginal
9	revenue product exceeded the salary that would have
10	to be paid by more than the value the school got from
11	the volunteer, they would hire that other applicant,
12	right?
13	A Yes.
14	MR. STEWART: Just to be clear, my
15	objections are continuing, right, Justin?
16	A Yes, you take the one that gives you the
17	most payoff.
18	MR. STEWART: Counsel, are my objections
19	continuing?
20	MR. RAPHAEL: Oh, yes, yes, absolutely.
21	MR. STEWART: Thank you.
22	MR. RAPHAEL: I'm very clear on what
23	your objection is.
24	MR. STEWART: Good. Thank you.
25	And I don't need to make it for every
	Page 158

1	question.
2	MR. RAPHAEL: Not at all. I don't
3	intend to suggest you waived that objection.
4	MR. STEWART: Okay, thank you.
5	Q What what, as an economist, do you
6	think some of the reasons might have been why a
7	Division I sports program wouldn't hire paid coaches
8	for all of the unrestricted positions?
9	MR. STEWART: I'm going to object. It's
10	beyond the scope of his report.
11	You can go ahead.
12	A Well, the general reason is the one you
13	just explained, which is that the marginal benefit
14	wasn't as much as the going rate for them.
15	Q You have some discussion in your report
16	of pay equity, right?
17	A Yes.
18	Q Did you perform any study of internal or
19	external pay equity in any sports program in
20	Division I?
21	A I guess it depends on what you mean by
22	"pay equity."
23	Q Let's get back to basics then.
24	What is the concept of pay equity?
25	A Well, the idea is is there's both
	Page 159

external and internal notions of -- of pay, and the internal notion is that, as in typical institutional pay structure, there's some comparison between people at different pay levels. So the notion of -- the basic idea is that there's a -- there's a wage differential across some internal positions that appears rationalized by -- typically, I think -- by norms that are common in the -- in the institution.

And then external pay equity has to do with the same comparison across institutions.

Q So, by way of example, internal pay

Q So, by way of example, internal pay equity would be if there is an animation studio and the company that has the animation studio has different sort of formalized job levels inside their company?

A Yeah, that is one example.

The government does it, too, with GS levels.

Q Right.

And then external pay equity would be that the people at the animation studio who have a job at a different level, they look out there and they say, "Why do the people at the other studio who have whatever job I have, why do they make more than me"?

•	
1	A Yes.
2	And, effectively, that might mean that
3	you're going to lose some people.
4	So both internal and external pay equity
5	has a purpose.
6	Q Now, did you study internal or external
7	pay equity at any Division I athletics department?
8	MR. STEWART: Object to the form.
9	A No.
10	We did study relative wage
11	determination, and that is the basis for my for my
12	analysis of damages, but there wasn't I didn't
13	make any attempt to try and explain why those wage
14	differentials existed.
15	Q So you're not offering any opinion in
16	this case as to whether there is internal or external
17	pay equity at any Division I program or in any
18	sports?
19	A No, not with respect to any individual
20	program, that's correct.
21	Q Are you offering an opinion that there
22	is pay equity at any Division I school across their
23	sports programs?
24	A No.
25	I cite some anecdotal evidence that
	Page 161

1 demonstrates that issues of internal pay and external 2 pay equity have -- show up. 3 There certainly is evidence that they're in the minds of some people, but I haven't done any 4 5 formal study of it. Well, do you have an opinion as to 6 7 whether pay equity between coaches in the same sport 8 at the same school explains coach salaries at that 9 school? I haven't tried to explain the 10 11 differences in salaries. I mean, there are -- the 12 regression analysis gives us measures of the relative 13 wages of all the different coaches, but I haven't 14 tried to explain why or -- either across sports or 15 within sports why those differences, why they exist 16 and whether -- what they're a result of. 17 And so you're not offering the opinion 0 that differences in coach salaries, either across 18 19 sports or within the same sport, are a function of 20 pay equity? 21 No, but they are a function -- they 22 exist, so they're undoubtedly a function of pay 23 structure which almost certainly has some components that are associated with these issues. 24 25 0 What do you mean by "pay structure"? Page 162

Just like it says. 1 So we -- for 2 example, this so-called step-down we give is a measure of the gap between the pay of the 3 unrestricted assistant coach and the newly-hired 4 5 formerly volunteer coach, so that's a pay 6 differential. 7 There's pay differentials -- they're 8 reported in the backup, they're not in the report, 9 but there are pay differentials between the head coach and the other coaches, and we actually measure 10 11 what those are in the categories we set up. 12 But you're not offering any opinion that 0 13 the differentials in one sport between salaries for different coaches in that sport are affected by the 14 15 differentials among salaries in another sport? 16 Α No. 17 That is an analysis that could be done, but I haven't done it. 18 19 I should have said yes, shouldn't I, 20 because you asked me, "That is an analysis you 21 didn't." 22 I wish you wouldn't do that. 23 Have you done any analysis of how the Q salaries -- the differential between salaries for 24 25 coaches in one sport affects the differential of Page 163

1	salaries of coaches in another sport?
2	A No.
3	That's the way it should have been.
4	Q In your view, were the volunteer coach
5	rules consistent with the concept of pay equity?
6	MR. STEWART: Can I hear that again?
7	I'm sorry.
8	(Whereupon, the requested portion is
9	read back by the reporter.)
10	MR. STEWART: Object to the form of that
11	question, vague.
12	A I haven't thought about that.
13	That's an interesting question because
14	the end of the of the rule why did the rule
15	end, for example, you could ask. I haven't asked
16	that question either, but it's an interesting
17	question.
18	Actually, I guess there is a research
19	project on that, to tell you the truth.
20	I hate that phrase. I shouldn't have
21	said that. I always tell the truth.
22	I haven't thought about that. As I
23	said, maybe I will think about it now that you asked.
24	Q Just to be clear, I'm not funding the
25	research project.

1 Are you offering any opinion as to --2 I'll break it down, maybe a little more straightforward. 3 So the -- the coaches who volunteered in 4 5 the actual world, they faced some level of 6 competition, maybe a lot, maybe not so much, for 7 their positions, right? 8 Α Yeah. 9 0 And are you assuming that that level of competition that the volunteer coaches faced for 10 11 their positions in the actual world would have been 12 the same intensity of competition that they faced in the but-for world? 13 MR. STEWART: Same standing objection. 14 Well, I don't make any assumption about 15 Α 16 what -- that kind of competition, right. 17 The kind of competition that we're discussing here is the alleged collusion. 18 19 I don't have -- there is nothing in my 20 report that goes to the question of what -- who the different applicants were for whatever the position 21 22 the unpaid coaches took when they did it. You know, 23 I don't have any -- I haven't decided that at all. 24 0 You have no opinion about the identity of the applicants for the volunteer positions in the 25 Page 168

1	actual world, right?
2	A Well, if you mean I'm assuming that
3	they the volunteer coaches that were in the
4	positions that they were in during the period of the
5	alleged collusion is the same as would have been
6	there had there not been collusion, I think I said
7	that about a hundred times.
8	MR. STEWART: I think the problem with
9	your question, Justin, is you're saying "identity of
10	the applicants."
11	Obviously one of the applicants, to the
12	extent there were more than one applicant in any
13	given case, is the coach who got the job, so it's
14	just a little ambiguous I think.
15	MR. RAPHAEL: I agree with you.
16	Let me try again.
17	Q You're not offering any opinion about
18	the identity of anyone who applied for or was
19	interested in a volunteer position who didn't get it,
20	right?
21	A Yeah, I am not.
22	Q And you're not offering an opinion about
23	the identity of anyone who would have been an
24	applicant for any of the paid positions you say would
25	have existed in the but-for world other than the
	Page 169

1	volunteers who were hired in the actual world?
2	A Yes, that's correct.
3	Q And, for that reason, you're not
4	offering any opinion about whether the competition
5	that the volunteers faced in the actual world was
6	more or less intense than the competition they would
7	have faced for their positions in the but-for world?
8	A Yes, that's right.
9	By "competition," you mean other
10	applicants I guess?
11	Q Right.
12	And, in fact, you're not offering any
13	opinion about the competition that coaches face
14	for to get their positions at all, right?
15	A No, I'm not other than the alleged
16	collusion, I'm not offering any opinion about
17	competition.
18	Q Would it be your expectation that more
19	coaches would have applied for paid positions in the
20	but-for world than applied for the volunteer
21	positions in the actual world?
22	MR. STEWART: Object, beyond the scope
23	of the report.
24	A Well, that's possible.
25	Q Do you have any opinion, one way or the
	Page 170

1 school that hired an additional paid coach would not 2 have hired the volunteer from the prior year even if 3 that volunteer applied? 4 MR. STEWART: I'm going to object, it 5 calls for speculation, but go ahead. I suppose it's possible. I don't know 6 7 what the reasons are of why that would occur, I 8 haven't -- I certainly haven't studied it. 9 O So you -- as an economist, you cannot think of any reason why a school that hired an 10 11 additional paid coach instead of an applicant who 12 previously was the volunteer would have made that 13 decision? Well, I think almost all of us can think 14 Α 15 of some reasons why that might happen, but I haven't 16 studied any -- whether any of them are actually 17 relevant. For example, the head coach could change, and then the head coach wants to change all the other 18 19 coaches. There is all kinds of possible ways that 20 that could occur, but I haven't really looked into 21 any of that. 22 Could one reason why a school that hired an additional paid coach but didn't hire the 23 24 volunteer in the prior season when they applied be that another applicant for the position was more 25

1	qualified?
2	A I suppose that's possible.
3	Q And you didn't investigate why any
4	Division I program that hired an additional paid
5	coach after the bylaws were amended decided to hire
6	one coach rather than another?
7	A No, I haven't I haven't studied that
8	question.
9	Q You haven't investigated the
10	qualifications of any coach compared to any other
11	coach in Division I, right?
12	A That's correct.
13	Q Is it possible that strike that.
14	As an economist, would it be your
15	expectation that some coaches would who would not
16	have been interested in a volunteer coach position
17	but would be interested in a paid coach position?
18	MR. STEWART: Again, I'm just going to
19	reassert my standing objection that you have given
20	me.
21	A That's possible.
22	Q And, as an economist, what would be some
23	of the economic reasons for that?
24	A Usually people prefer jobs that pay
25	more.

1 step-down, which is some number, it implies that 2 there is a negative differential, we apply that to the -- the paid assistant coach at St. Mary's to get 3 the prediction of what you would get -- of what the 4 5 St. Mary's newly-hired formerly unpaid coach would 6 get. 7 Now, are you asking me whether that 8 number is different from the number that we would 9 predict for the USC coach? I wasn't sure what your --10 11 Let me try it again, and you're lucky I Q 12 didn't go to St. Mary's. 13 I'm sure it's a nice school. Α 14 So I'm asking you to compare the but-for 0 15 world salary for the lowest-paid coach at USC and the 16 actual salary for the coach in the same sport at 17 St. Mary's. MR. STEWART: I'm just going to object, 18 19 it's vaque. There are obviously numerous salaries 20 that are being paid to the staff, so are you referring to all the salaries paid to the staff or 21 22 the lowest one, or what are you referring to? 23 MR. RAPHAEL: I'll try again. 24 Maybe I'll just try to cut through it. 25 Q It's possible, isn't it, that at some Page 178

1 schools that pay their coaches a lot, your estimate 2 of the salary that would have been made by the person who volunteered is more than some coaches who were 3 paid in the actual world in the same sport at other 4 5 schools made, right? It's possible. 6 Α 7 Right. Q 8 And because, I think you testified 9 earlier, that people generally prefer to make more money rather than less, right? 10 11 Other things the same, don't forget that Α 12 part. 13 Right. Q 14 Other things the same, right? 15 Right? 16 Α Yes. 17 Q Okay. 18 So it's possible, isn't it, as an 19 economist, you -- strike that. 20 As an economist, you might expect that 21 if the volunteer position at USC was paid at a higher salary than the person at St. Mary's actually earned, 22 23 that that person might have been interested in that 24 position at USC instead of St. Mary's? 25 Well, that's possible in the sense Α Page 179

1 anything is possible, but, you know, the -- you 2 haven't held things constant. So working at St. Mary's is not the same 3 thing as working at USC, so you didn't hold other 4 5 things constant. You have to have all the 6 characteristics -- I mean, it might be, I suppose, I'm a devout Catholic, I don't know where Moraga is, 7 8 USC is downtown, it's riddled with -- they paid a billion point one dollars for a sexual harassment 9 suit and taxed the faculty by taking away the 10 11 pensions. That is not a good job. We consider that 12 a bad job in academia. 13 I even tried to encourage a lawsuit by 14 some of the faculty. They never did it. 15 So you're not really comparing -- that 16 is comparing apples -- you didn't hold everything 17 else constant when you made that comparison. 18 0 Okay. Holding everything else constant, 19 as an economist, you would expect that if someone 20 could earn more as the last paid volleyball coach at 21 one school, they would be more interested in that 22 position than being the second highest paid coach at 23 another school at a lower salary, right? 24 MR. STEWART: Objection, vaque. 25 Α Everything else the same, I think Page 180

1	everything else the same, and that's hard to say that
2	"everything else the same" in that case because
3	the it depends on whether the what you do in
4	each of those positions is exactly the same, but
5	assuming that it is, then yes, I think they would be
6	more they would prefer the higher salary.
7	Q Well, someone would only not prefer to
8	higher salary as the last paid coach at one school
9	compared to the second highest strike that.
LO	In a world where someone's salary as the
L1	last paid coach at one school would be higher than
L2	their salary as the second paid coach at another
L3	school, in order for them, as a matter of economics,
L4	to take the lower paid position, there would have to
L5	be other intangible benefits that were worth at least
L6	as much to them as the difference in salary, right?
L7	MR. STEWART: Object to the form.
L8	A That makes sense, yes.
L9	That is the other things constant
20	problem.
21	Q Right.
22	And you in this case have not studied
23	any of the intangible benefits of coaching at any
24	school versus any other in any sport, right?
25	A Well, I haven't studied the intangible
	Page 181

1	benefits, no, that's correct.
2	Q And so it would be your expectation,
3	though, as an economist, that at least some coaches
4	who could have made more in the last paid coaching
5	position that you say would have existed in the
6	but-for world would have been more interested in that
7	position than the jobs they actually had paid in the
8	real world, right?
9	MR. STEWART: Same objections.
10	A Well, I think that requires this
11	statement that other things have to be the same,
12	right, so that's that's an innocuous statement to
13	say that people would prefer more money to less. I
14	don't think that is objectionable to anybody,
15	actually, not even economists.
16	Q Could you go to page paragraph 54 of
17	your report. I believe that's page 29.
18	A Fifty-four, paragraph 54.
19	That is the one we were on before.
20	Twenty-nine, yes.
21	Q Maybe take a minute to review that and
22	give the court reporter a break.
23	A I think this is the one we went over
24	before, is that correct, am I wrong, or are we on
25	different pages here?

1	Q Same page.
2	MR. STEWART: It's the same paragraph,
3	if that is your question.
4	A Yeah, got it.
5	Q Do you see there that you write, "Absent
6	a conspiracy to suppress the compensation of these
7	workers to zero, the market rate would be greater
8	than zero."
9	Do you see that?
10	A Yes.
11	Q What do you mean by "market rate" in
12	that sentence?
13	A The market rate would be obviously
14	determined, in the broadest sense, by supply and
15	demand absent the conspiracy.
16	Q So the market rate is determined by
17	supply and demand throughout the entire market?
18	A Yes.
19	Q And in order to determine supply and
20	demand, do you have to know what the market is where
21	you are determining supply and demand?
22	A No.
23	Q So your testimony, as an economist, you
24	can determine supply and demand for a market that you
25	have not defined?

1 In other words, relative wages would be 2 stable if you compare -- well, if you really wanted to find -- to predict the wage of an AI person, you 3 have to have some kind of a benchmark. 4 5 It's possible actually that wages would all go up and down together, even including lawyers 6 7 and garbage men and everything else, but it wouldn't 8 help you to get at the actual -- what the actual wage 9 rate is, you need to have some person who has a relative wage that's determined by the same factors 10 11 as determines the AI wage, that is the basic idea. 12 So in order to calculate a relative wage 0 13 rate that is accurate you think you need to use jobs 14 whose salaries are determined by the same factors? 15 Yes. Α 16 Have you done any analysis as to whether 17 the jobs -- the salaries of jobs coaching different sports are determined by the same factors? 18 19 Α Well, yes and no. 20 The -- to some extent the analysis I have done is a relative wage differences. So to the 21 22 extent the relative wage differences are stable across the groups, they don't differ, that is what I 23 24 mean by that, across the different groups that I

Page 186

analyzed, that tells us something about the same

25

1	Q And if those step-downs were not close,
2	what conclusion would you draw?
3	A That that there are some differences
4	in the supply and demand factors between the two sets
5	of categories, A and B.
6	Q I see.
7	And if you found that there were
8	different step-downs between salaries in from
9	sport-to-sport, would that tell you that there's
10	different supply and demand in different sports?
11	A Somewhat different, yeah.
12	Q Do you have any opinion as to whether
13	supply and demand for coaches in each Division I
14	sport is the same?
15	A Well, I haven't done that test, so I
16	haven't done the analysis of what would allow you to
17	say.
18	Q So you have no opinion?
19	A So I haven't really drawn I think
20	they're probably similar factors in supply and
21	demand, but I don't know that for a fact.
22	Q So do you have any opinion on whether
23	the supply and demand factors for each sport in
24	Division I are the same?
25	A I think they're probably similar, yes,
	Page 189

1 but, as I said, I haven't done any tests that would 2 determine that for sure. 3 And that's a test that you could have O done? 4 5 Α It could be done. Well, at least across the groups we had. If we had more data, we could do 6 7 it across sports too. 8 And if you found that the supply and 0 9 demand factors in different sports were different, what implications would that have for the analysis 10 11 that you did? 12 Well, it would mean that we would have Α 13 adjusted the analysis so that it predicts correctly. In other words, that we would have taken 14 15 account of the fact that supply and demand factors 16 were different when we did our prediction of what the 17 damages would be. 18 In other words, if we -- that is why we did it in the groups we did. 19 20 Remember, the way the damages are 21 calculated are by using the step-down applied to the 22 payroll of the lowest-paid assistant coach in whatever place it is that we're looking at. 23 24 If it turns out the step-downs are different, then we calculate different damages for 25 Page 190

1	those people.
2	Q In other words, if there's different
3	supply and demand in different Division I sports, an
4	analysis that predicts wages based on grouping sports
5	together would lead you to incorrect estimates?
6	A It would probably be due to some that
7	were too high and some that were too low, and
8	obviously but, of course it may not, depending on
9	whether or not there are significant differences.
10	Q Could you go to paragraph 39 of your
11	report, and do it slowly to give our reporter a short
12	break.
13	A Okay.
14	Q All right.
15	The third sentence of paragraph 39 of
16	your report says that "The labor market at issue in
17	this case is the market for Division NCAA
18	Division I assistant coaches in the United States."
19	Do you see that?
20	A Yes.
21	Q All right.
22	Now, earlier you testified that you have
23	not defined a market in this case. Is that your
24	testimony?
25	A Well, you have to be careful here.
	Page 191

When I talk about -- these people are in 1 2 the labor market that I'm going to analyze, but I'm not drawing the edges of the labor market, I'm not 3 using concentration analysis or anything like that. 4 5 So, unfortunately, that word "labor market" is maybe used multiple ways at different 6 7 times. 8 And, here, all I mean is that I'm going 9 to be analyzing this particular group of people for evidence of -- direct evidence of monopsony power. A 10 11 very popular word nowadays. 12 By the way, invented by Joan Robinson, a woman who knew her Latin. 13 14 Q All right. So you have not defined any labor market 15 16 in the sense of trying to capture the set of 17 reasonable substitutes? Yes, I haven't tried to define the --18 Α 19 the perimeter of a labor market, let's put it that 20 way. 21 Q Right. 22 And so do you have any opinion, for example, as to whether jobs coaching swimming 23 24 belong in the same market in the economic sense as jobs coaching softball? 25

1 MR. STEWART: Object to the form. 2 Well, I think I tried to make clear that Α I didn't define the perimeters of a labor market for 3 each of these categories, so I haven't really taken a 4 5 position on that -- on that issue. 6 O Okay. 7 In thinking about the supply and demand 8 factors that contribute to a wage level, is it 9 important to understand the set of jobs that are at issue in those supply and demand curves? 10 11 Well, you have to say something about 12 what the jobs are. You have to define them and 13 measure their wage rates. So if -- if -- if people who have 14 Q 15 certain skills have the ability to do one set of jobs 16 and people with a different set of skills have the 17 ability to do a broader set of jobs, could that affect supply and demand in those two sets of jobs? 18 19 MR. STEWART: Object to the form of the 20 question, incomplete hypothetical, vague. 21 Well, supply and demand is really a 22 result of the aggregation of the skills that people 23 have and what they're willing -- what you have to pay 24 them; in other words, how much they expect to receive, how much they -- what will extract labor 25

1	demand, right?
2	A One of the many factors, supply and
3	demand.
4	Q So it might be that there are jobs
5	available to coaches in some sports that don't have
6	an equivalent in other sports, right?
7	MR. STEWART: Object to the form, vague.
8	A I'm not sure what you mean by that.
9	Q So a golf coach might work at a country
10	club, right?
11	A Oh, so you mean certain kind of
12	employers for certain is that what you mean?
13	Q You said it better than I did.
14	I'll try another question.
15	In different sports there could be
16	different in different sports there could be
17	bigger or smaller sets of employers, right?
18	A Yes, that's right.
19	Q And if if there are if there are
20	employers who are available to coaches in one sport
21	and not in the other, that could affect the wage
22	level, right?
23	A Yes.
24	Q And you since you haven't defined a
25	labor market in this case, you haven't defined any
	D-1-105
	Page 195

1	it.
2	Do you have any opinion as to whether
3	supply and demand for coaching any sport in
4	Division I is broader or just limited to assistant
5	coaching jobs in Division I?
6	MR. STEWART: I'm sorry, I am going to
7	object, that is vague.
8	Maybe the witness could answer.
9	A I haven't actually studied that
10	question, so I don't have an opinion about that, no.
11	Q Would it be your expectation that the
12	wage level for coaching any particular sport is
13	dependent on supply and demand for jobs coaching that
14	sport other than just being an assistant coach in
15	Division I?
16	A It could.
17	It could.
18	Q But do you have any opinion as to
19	whether that is actually the case for any sport in
20	Division I?
21	A Other than just casual observation, I
22	have not I certainly haven't studied that issue.
23	I don't have an opinion, based on what this report is
24	about, on that topic.
25	Q So are you offering the opinion that the
	Page 197

1 wage level for any Division I sport, coaching that 2 sport, is limited to the supply and demand with respect to Division I assistant coaching jobs in that 3 sport? 4 5 MR. STEWART: Object to the form. 6 Α No. 7 The supply and demand is broader than. 8 That is why I didn't try to define the peripheries of 9 a market. It's as broad as anything that could affect supply and demand for different kinds of 10 11 workers. 12 Right, and -- and jobs coaching a sport 0 13 outside of Division I could affect the wage level of 14 jobs coaching in Division I, right? 15 Α Sure. 16 MR. STEWART: Object to the form. 17 0 I think I take it from your answer so 18 far, you have also not defined a geographic market in this case? 19 20 Α That is correct. 21 So you have no opinion, one way or the other, as to whether supply and demand for jobs 22 23 coaching a particular sport is confined to a 24 particular geographic area? 25 Α No, I don't have any opinion. Page 198

1	Yes, I don't have any opinion.
2	Q And do you have any opinion, one way or
3	the other, as to whether the wage level for jobs
4	coaching in Division I is a function of local supply
5	and demand?
6	A It could be.
7	Q As an economist, would it be your
8	expectation that the wage level for some jobs
9	coaching in Division I would be localized rather than
10	national?
11	A It could be.
12	Q But I am correct that you have not done
13	any analysis to answer that question?
14	A That's correct.
15	It's really not necessary, given the way
16	we construct our analysis of damages.
17	Q Well, sir, you did define a geographic
18	market in the Detroit nurses case, didn't you?
19	A Yes.
20	Q Okay.
21	So why did you do why did you define
22	a geographic market in the Detroit nurses case?
23	A Well, that was because the core of the
24	monopsony there is the mobility of the nurses,
25	that's that's really the basis, I think, for the
	Page 199
	i age 177

1	potential they have, monopsony power, in that market,
2	because the nurses are relatively immobile.
3	Q Is it your testimony that all coaches
4	who are volunteers are have more mobility than the
5	nurses that were involved in the Detroit case?
6	MR. STEWART: Object to the form of the
7	question.
8	A I haven't studied whether these have
9	more or less mobility than the nurses did.
10	Q Do you know whether some Division I
11	sports are played in Canada?
12	A I didn't quite catch what you said.
13	Q Do you know whether some Division I
14	sports are played in Canada?
15	A In Camden?
16	Q Canada.
17	A Oh. You mean the country?
18	Q Yes.
19	A Our great friendly northern neighbor.
20	You know, I don't know if the NCAA is
21	applicable in Canada.
22	Q Okay.
23	Do you know whether some of the sports
24	that Division I schools play are also played by
25	people maybe in other leagues in Canada?
	Daga 200
	Page 200

1	А	Yeah, I'm sure they are, yes. Lacrosse,
2	for one.	
3	Q	Right.
4		Ice hockey?
5	А	Absolutely.
6	Q	Right.
7		And you didn't study any relationship
8	between coac	hing jobs in Canada and the wage levels
9	for coaching	ice hockey or lacrosse in Division I,
10	right?	
11	А	No, I did not.
12		Yes, I did not.
13	Q	We'll get it right one of these times.
14		All right.
15		I want to talk a little bit about the
16	data you use	d.
17	A	Yes.
18	Q	All right.
19		So we'll try to take this step-by-step.
20	I think ther	e will be a lot of numbers flowing
21	around, so I	'm going to try to be clear about what
22	numbers we'r	e both talking about.
23		Could you go to paragraph 61 of your
24	report.	
25	A	That is the data section?
		Page 201

1	school count.
2	So they had they had to the
3	data the observations had to satisfy all these
4	criteria. We had to have salaries, we had to have an
5	expansion, and we had to have access we had to
6	know what the data was in two different years, pre
7	and post.
8	So these are all the criteria that were
9	used to determine whether or not they could be used
10	in the regression analysis.
11	MR. RAPHAEL: Do you need to clarify
12	anything?
13	THE COURT REPORTER: No, I'm good.
14	Thank you.
15	Q So am I right that the schools that you
16	chose to include in your regression analysis were the
17	schools who added an additional paid coach in at
18	least one program after the bylaws were amended?
19	A Yes.
20	Q So if a school did not add any paid
21	coaches in any program where it had previously hired
22	a volunteer, you did not include that school's data
23	in your regression?
24	A That would be if they didn't, that
25	would certainly exclude them, but there may be other
	Page 207

1	reasons too.
2	Q Okay.
3	So, looking at the numbers corrected,
4	which are 85 schools you included, and 175 schools
5	you did not, is it fair to say that a majority of
6	schools for which you had usable data at the time of
7	your November 1 report did not hire an additional
8	paid coach in any sport where they had previously
9	hired a volunteer?
10	A I think that's true, yes.
11	MR. STEWART: Can I hear that back? I
12	got distracted. That question and answer, please.
13	(Whereupon, the requested portion is
14	read back by the reporter.)
15	MR. STEWART: I think that is ambiguous,
16	but go ahead.
17	THE WITNESS: That is why I said I think
18	it's true.
19	There is a lot of clauses in that
20	phrase, but I think it's true.
21	Q Okay.
22	Well, is it true that is it true that
23	90 schools for which you had usable data did not, as
24	of November 1, 2024, did not hire an additional paid
25	coach in any sport where they had hired a volunteer
	Page 208
	1436 200

1	where they had hired a volunteer during the class
2	period and not any others?
3	A Yes.
4	Q Okay.
5	And for those sports where schools that
6	hired an additional paid coach in some sports but not
7	others, you only included data in your regression for
8	the salaries in the sports where they hired an
9	additional paid coach?
10	A Yes.
11	Otherwise, they wouldn't be usable for
12	the step-down, they would be missing data.
13	Q Well, you didn't put in, say if
14	school A didn't hire an additional coach in
15	volleyball, but they did in golf, you would use them
16	for your golf regression and not your volleyball
17	regression, right?
18	A Yes.
19	Q Okay.
20	But you could have put in a zero for a
21	school that hired didn't hire a paid coach in golf
22	after the bylaws were amended and put that into your
23	regression, right?
24	A You could put a zero in there, sure.
25	Q But you didn't do that?
	Page 210

1	A No.
2	Q Why not?
3	A Well, because we were looking at the
4	salaries that were paid in the in the step-down
5	analysis.
6	If when it comes to calculating the
7	damages this is just for the purpose of the
8	step-down.
9	When it comes to calculating the
10	damages, we do take account of the point that you
11	just made, which is that if there is no assistant
12	coach that was paid, then there won't be any damage
13	assigned to the person who was hired as a volunteer
14	coach.
15	Q Okay.
16	Suppose there were do you know if at
17	any school that hired an additional paid coach in one
18	sport after the bylaw amendment whether they had any
19	volunteer coaches working after the bylaw amendment
20	in any other sports?
21	MR. STEWART: Object to the form of the
22	question, lacks foundation.
23	A I don't I wouldn't know that detail,
24	no.
25	Q Like, for example, did you know that
	Page 211

1	Rudy Barajas, who is one of the Plaintiffs, worked as
2	a volunteer after the bylaws were amended?
3	MR. STEWART: Object to the form of the
4	question.
5	A I did know that, yes.
6	Q Okay.
7	So, for Fresno State, where Rudy Barajas
8	coached you know that, right?
9	A Yes.
10	Q All right.
11	So for the sports in which Fresno State
12	hired an additional paid coach after the bylaws that
13	were amended, right, you put those data points into
14	your regression, right?
15	MR. STEWART: Objection, lacks
16	foundation.
17	A You mean I think it's explained here.
18	We put in the data if there was an
19	additional paid coach hired.
20	Q Right.
21	So if Fresno State hired an additional
22	paid coach in in softball after the bylaws were
23	amended, you made that part of the data you used for
24	your regression?
25	A Yes.
	Page 212

1	А	Yes, that is correct.
2	Q	Okay.
3		So does Rudy Barajas' salary of zero,
4	after the by	laws were amended, does that factor into
5	the market wa	age level?
6	А	No, it doesn't.
7	Q	It doesn't?
8	А	No.
9	Q	Why not?
10	А	Well, because the whole point is that
11	the market wa	age is the wage that's paid, presumably
12	would be paid	d at Fresno State after Barajas left.
13		The market wage is the wage that
14	provides the	compensation to allow you to track
15	people, that	is what the market wage is.
16	Q	Well, there was nothing prohibiting
17	Fresno State	from paying Rudy Barajas, right?
18		MR. STEWART: Object to the form of the
19	question, la	cks foundation.
20	Q	No NCAA rule prohibited Fresno State?
21	А	I don't think there was, no.
22	Q	Okay.
23		Just so a clear record.
24		No NCAA rule prevented Fresno State from
25	paying Rudy l	Barajas in the 2023-2024 season, right?
		Page 214
		raye 211

1 Α I understand that to be the case, yes. 2 So the amount of money that Rudy Barajas 0 was compensated at that time, right, reflected supply 3 and demand in the market, correct? 4 5 MR. STEWART: Object to the form of the question. 6 7 Α Well, no, it didn't, that is the problem. 8 9 O Why didn't it? Well, we have given about ten reasons 10 Α 11 why it didn't, one of which is that there is a 12 continuing issue of payment, how it could easily be 13 the case that the expectation was that there would be 14 an unpaid coach, and that expectation could last for 15 some length of time. I don't know how long it lasted 16 in this case. 17 That is one reason. Another reason is that it takes some 18 19 time for these things to adjust and for wage rates 20 to -- people who have previously worked, obviously, at no wage, have volunteered, and they, themselves, 21 22 probably received some expectation of what they're 23 supposed to get, and that takes time to adjust. So there are all kind of reasons why a 24 25 single example of one person doesn't tell you much Page 215

1 about what's actually happening in the market 2 overall. 3 I mean, for example, as you just explained, there are 84 schools where people who 4 5 weren't being paid are now being paid. 6 I'm not --7 And I imagine that is the most. Α So I appreciate, sir, your opinion that 8 Q 9 there's a variety of reasons why the market rate that you calculate is not what you contend the equilibrium 10 11 market rate is, okay, I appreciate that. 12 What I'm asking you is: Whatever the 13 market rate was in 2023-2024, whether or not you think it was depressed, the fact that Rudy Barajas 14 15 earned zero, that factors into the market rate, 16 doesn't it? 17 Well, it factors into the display -- it Α is correct to say that it does have an effect on the 18 19 market -- on the supply and demand. 20 Thank you. That is what I was asking. 0 Yes, it's just one observation. 21 Α 22 Right. Q But I don't think it reflects what 23 Α 24 supply and demand would be in the equilibrium. 25 Totally appreciate that. Q Page 216

1 But it is correct, sir, that Rudy 2 Barajas getting paid zero to coach after the bylaws were amended affects supply and demand, right? 3 It has an effect on supply and demand, 4 Α 5 but, as I said, I don't think it affects what the equilibrium wage would be at the point that we're 6 7 interested in calculating the market wage. 8 Q Right. 9 And you did not include a salary of zero from Rudy Barajas, which is what he earned in 10 2023-2024, after the bylaws were amended, in your 11 12 regression analysis, correct? 13 Α That's correct. 14 MR. RAPHAEL: Why don't we take a break 15 there. 16 MR. STEWART: Okay. THE VIDEOGRAPHER: This concludes media 17 number four of the videotape deposition of Dr. Orley 18 Ashenfelter. The time is 3:11. We are off the 19 20 record. 21 (Brief recess taken.) 22 THE VIDEOGRAPHER: This begins media number five of the videotape deposition of Dr. Orley 23 Ashenfelter. The time is 3:22. We are on the 24 25 record.

1	the schools for which you had usable data did not
2	hire an additional paid coach in any sport where they
3	hired a volunteer, right?
4	A Yes, that's right.
5	Q And that is the majority of schools for
6	which you had usable data, right?
7	A Yeah.
8	Q Now, those 90 schools that did not hire
9	an additional paid coach in the actual world after
10	the bylaws were amended, were those schools' data
11	used in your analysis in this case in any way?
12	A Those schools weren't used in the
13	regression analysis.
14	Q Were they used in the step-down?
15	A No. That is the regression analysis.
16	Q You okay.
17	So, did you do anything to compare
18	strike that.
19	Did you do anything to determine whether
20	the 85 schools whose data you used in your step-down
21	analysis were representative of all schools in
22	Division I?
23	A No. There hasn't been any comparison
24	between those schools and the other schools.
25	Q So you don't have an opinion then, one
	Page 220

1	way or the other, as to whether the 85 schools whose
2	data you used in your step-down regression were
3	representative of all schools in Division I?
4	MR. STEWART: Objection, vague.
5	A No.
6	There was no there's no they
7	aren't intended to be necessarily representative,
8	they're the ones that expanded, as is described here.
9	Q Well, could it be that the schools that
10	were the ones who decided to expand their sports
11	programs after the bylaws were amended that they
12	differ in some ways from schools who didn't?
13	A Yes.
14	Q Could it be that the schools that
15	expanded their sports coaching staffs after the
16	bylaws were amended were schools that had more money
17	than schools who didn't?
18	MR. STEWART: Object to the form, and
19	vague.
20	A I haven't studied why they're different.
21	I mean, there's many possible
22	explanations.
23	I mean, not explanations, many possible
24	comparisons you could make.
25	I don't know what they would show.
	Page 221

1	A So the no hypothesis here is that the
2	step-down effect is zero, which would mean that the
3	lowest-paid was getting paid the same as the next
4	lowest-paid.
5	Q In other words, where you find that the
6	result of the regression is not statistically
7	significant, you don't have a level of confidence
8	that the step-down you found for that group of sports
9	is not zero?
10	MR. STEWART: Objection, vague.
11	A That's right.
12	Q Did you does your amended report find
13	that any results of your regressions are not
14	statistically significant?
15	MR. STEWART: Would you like to see?
16	THE WITNESS: Yeah, we can look at it.
17	I think they're more or less the same.
18	You can mark it if you want.
19	Q I'm not sure I have that, so if you
20	don't know without looking, I can't blame you for
21	that, I'm just wondering.
22	A I don't know without looking, but I
23	think the results are very similar.
24	They're not identical, but they are
25	similar.
	Page 238

1	MR. STEWART: They are what they are.
2	MR. RAPHAEL: Thank you.
3	A I don't think you're missing much, put
4	it that way.
5	Q Could it be the case that the coaches
6	who were hired as additional paid coaches in
7	2023-2024 were more skilled or experienced than the
8	coaches who volunteered during the class period?
9	MR. STEWART: A standing objection,
10	again.
11	A Well, I don't know.
12	Q You haven't studied whether the
13	qualifications of any coach who was hired as an
14	additional paid coach after the amendment compared to
15	the coach who volunteered in that sport at that
16	school during the class period?
17	A That's correct.
18	Q And why have you not done that?
19	A Well, I think, in part, because we don't
20	have the the data to deal with. You would have to
21	have you would have to know more about the
22	characteristics, I think, of the coaches in order to
23	do that kind of analysis.
24	We didn't the data we collected
25	doesn't have a whole lot of information about the
	Page 239

1 individual characteristics of the coaches. 2 And, as an economist, how would you go 0 about collecting the individual characteristics of 3 the coaches in order to compare the skills and 4 5 qualifications of coaches who were hired for paid positions and the volunteers? 6 7 Well, I think you could probably do it Α 8 the same way as -- as you would do any study of 9 individual determinants of pay. You would want to ask for the characteristics -- well, you might have 10 11 to actually contact the person, the coach, to ask 12 them what their characteristics -- somehow you have 13 to find out the characteristics of the coach. 14 It might be that the person who 15 responded to our subpoena couldn't do that, in which 16 case you would have to contact the person. 17 The way we normally gather data on schooling, experience, it is by contacting the person 18 and actually asking them. 19 Sometimes you can get it from 20 administrative data, but often we have to just ask 21 22 people. 23 Did you do anything to try to account Q 24 for or address the possibility that the coaches who were hired as additional paid coaches after the 25

1	bylaws were amended had more skills or experience
2	than the coaches who were volunteers?
3	A No.
4	Q Is it possible that schools that paid
5	additional assistant coaches in 2023-2024 had higher
6	demand for coaching services than the schools who did
7	not?
8	MR. STEWART: Object to the form.
9	A It's possible.
L O	Q Did you do anything to control for that?
L1	A No.
L2	Q If schools that paid assistant coaches
L3	in 2023-2024 had higher demand for coaching services
L 4	than the schools that didn't, as an economist, would
L5	that generally lead you to believe that they would
L6	pay more than the other schools?
L7	A Not necessarily. It depends on how
L8	elastic the supply of coaches is, it would depend on
L9	that.
20	It is likely they would hire more
21	coaches, not that they would pay them more.
22	Q And you the elasticity of supply of
23	coaches is how much a change in the salary of the
24	coach affects coaches' willingness to work?
25	A Yes.
	Page 241

1	Q	And you haven't measured labor supply
2	elasticity fo	or any coaching in any sport, right?
3	A	That's correct.
4	Q	And you haven't measured the elasticity
5	of demand for	coaching services in any sport, right?
6	A	That's correct.
7	Q	Did you control for age in your damages
8	model in this	s case?
9	A	No.
10	Q	Did you well, why not?
11	A	I don't think we have data on the age of
12	the coaches.	
13	Q	Did you control for tenure in your
14	damages model	l in this case?
15	A	No.
16	Q	Why not?
17	A	Same reason, I don't think we had that
18	data.	
19	Q	Did you control for experience in your
20	damages model	l in this case?
21	A	No.
22	Q	Why not?
23	A	Basically, the same reason, I don't
24	think we have	e data on that.
25	Q	Did you control for any
		Page 242

1	employer-specific effects in your model in this case?
2	A I'm trying to think.
3	The the not in the in the in
4	the relative wage analysis, no.
5	Q Did you do it in any other way?
6	A Well, in the way that we would calculate
7	the damages, we would use the step-down and then
8	apply it to the assistant coach that was in the same
9	program as the formerly volunteer coach position was
10	in, so there would be a natural adjustment for the
11	level of salaries at the university and in the sport.
12	Q In the animation workers' case you did
13	control for how compensation normally varies across
14	workers based on their individual characteristics,
15	didn't you?
16	A Well, that is because we had the data on
17	individuals, yes.
18	We compared the same people.
19	Q Did you think that was important to your
20	analysis in that case?
21	A It was a very easy way to get rid of
22	having to control for a lot of other derivatives.
23	Q All right.
24	But you wanted to so you wanted to
25	control for that in the animation case, right?
	Page 243

1 Α Yes. 2 MR. STEWART: Objection, vague. 3 In the animation case you wanted to 0 control for the characteristics of workers that could 4 5 affect one worker being paid a different amount than 6 the other? 7 Α Yes. 8 And in your damages model in the 0 9 animation case you controlled for age and tenure and gender, right? 10 11 I -- I think you can't -- if you're 12 looking at fixed effects, you can't really control 13 for gender because that doesn't change, so I'm not -we couldn't have controlled for that unless we used 14 15 it as an interaction between the step -- the increase 16 in pay. I don't think that we did use that. 17 And experience, that could matter because, normally, experience is entered as a 18 19 quadratic, so if you take the difference in a 20 quadratic equation, you get a linear term, so we 21 probably did have experience in there, and maybe even 22 tenure, but I think the analyses used the same. 23 The fixed effects wouldn't have 24 controlled for gender. I don't think it controlled 25 for gender. That would be the only way you could do

1	A, they don't get any premium.
2	Okay. Now, what we're going to do is
3	we're going to take the difference between the
4	guys the lowest guy in A compared to the lowest
5	guy next lowest in A.
6	That is what we're trying to measure,
7	that gap, not not the difference between A and B.
8	So that difference is basically
9	controlled for.
10	In other words, once we take the
11	difference between the two coaches in A, we subtract
12	out the part that is due to the extra compensation
13	for the cost of living.
14	In other words, the gap between the two
15	is is completely comparable to the gap to, you
16	know, someplace in Birmingham or someplace.
17	Q You're saying that in this case you did
18	some controlling for employer-specific effects?
19	A Yes.
20	Q In this case you did not control for
21	employee-specific effects?
22	A That is correct.
23	I don't know if that was clear.
24	Did anybody understand that?
25	Q I did.
	Page 250
	1 490 230

1	So let's just take an example.
	_
2	If in the actual world after the bylaws
3	were amended the new paid-coach earned 75 percent of
4	what the next highest paid-coach earned, okay, you
5	just assumed you know, let's say the 75 percent
6	was the step-down that you calculated, right?
7	You assumed that that ratio would be the
8	same for the coaches who volunteered in the class
9	period, right?
10	A Yes.
11	Q All right.
12	But that ratio might be different if the
13	coach who was actually hired was a better coach
14	compared to the next highest-paid coach than the
15	volunteer was, right?
16	MR. STEWART: Object to the form.
17	A Well, that is possible, sure.
18	MR. RAPHAEL: This has been a
19	particularly intense hour for our court reporter.
20	Maybe we'll take a break here. I'll check the time
21	on the record and see see how we can wrap this up.
22	MR. STEWART: Okay, great.
23	Thank you.
24	THE VIDEOGRAPHER: This concludes media
25	number five of the videotape deposition of Dr. Orley
	Page 251

1	Ashenfelter. The time is 4:10. We're off the
2	record.
3	(Brief recess taken.)
4	THE VIDEOGRAPHER: This begins media
5	number six of the videotape deposition of Dr. Orley
6	Ashenfelter. The time is 4:22. We are on the
7	record.
8	Q Does your step-down method measure
9	whether class members are injured or how much they
10	were injured?
11	A How much.
12	Q Your step-down method doesn't measure
13	whether class members were injured?
14	A No, it measures what the market rate
15	would be, and that needs to then be combined with
16	additional information to get an injury.
17	Q What information is that?
18	A Well, the it's then applied to the
19	next lowest-paid assistant coach in the place where
20	the person whose damages are being calculated is
21	located.
22	Q We talked a little bit about this
23	earlier, I wanted to make sure I understood it: Your
24	amended report from November 26, you talked about how
25	there was an issue with the combined coaches.

1	CERTIFICATE
2	
3	I, RUTHANNE UNGERLEIDER, a Certified Court
4	Reporter and Notary Public of the State of New
5	Jersey, certify that the foregoing is a true and
6	accurate transcript of the stenographic notes of the
7	deposition of said witness who was first duly sworn
8	by me, on the date and place hereinbefore set forth.
9	I FURTHER CERTIFY that I am neither
10	attorney, nor counsel for, nor related to or
11	employed by, any of the parties to the action in
12	which this deposition was taken, and further that I
13	am not a relative or employee of any attorney or
14	counsel in this case, nor am I financially
15	interested in this case.
16	
17	n
18	Rutharme Ungerleider
19	full arme Ungerte cer
20	RUTHANNE UNGERLEIDER, C.C.R., C.R.R.
21	LICENSE NO. XIO1634, XIO0115
22	
23	
24	
25	
	Page 268